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The operating-financing distinction in financial reporting

Richard Barker*

Abstract – This paper addresses an important issue of presentation in the financial statements, namely the distinction between, on the one hand, the obligations and associated flows arising from the provision of finance to an entity ('financing') and, on the other hand, all other activities of the entity ('operating'). This operating-financing distinction has been well-established in the finance literature since the work of Miller and Modigliani (1958, 1961) and is ubiquitous and of considerable importance in practice in financial markets (e.g. Koller et al., 2005; CFA Institute, 2005; Penman, 2006). Yet accounting standards are underdeveloped in this area, and there are gaps and inconsistencies in both IFRS and US GAAP. Drawing upon the distinction between nature and function in the presentation of financial statement information, the paper contributes, first, to enhance our theoretical understanding of the operating-financing distinction, which is currently defined in different and unreconciled ways in the literature and, second, to propose a practical basis for accounting standard-setters to determine requirements for the reporting of financing activity in the financial statements.

Keywords: IFRS; operating-financing; debt; presentation

1. Introduction

This paper addresses how accounting standards should require the separate reporting of the obligations and associated flows arising from the provision of finance to an entity ('financing'), as distinct from all other activities of the entity ('operating'). This operating-financing distinction has been well-established in the finance literature since the work of Modigliani and Miller (1958) and Miller and Modigliani (1961) ('Miller-Modigliani') and is ubiquitous and of considerable importance in practice in financial markets. For example, leading practitioner texts such as Koller et al. (2005) recommend an enterprise value approach to corporate valuation, which requires the separation of operating activity from financing activity. A demand for a more effective incorporation of the separation of financing activities into accounting standards has been clearly stated by investors and others (CFA Institute, 2005; JIG, 2006). This demand is acknowledged by the standard-setters themselves. The presentation of financing activities is, at the time of writing, on the agenda of both the FASB and the IASB in their joint project on the

Presentation of Financial Statements (FASB, 2008). The subject matter of this paper is therefore topical and timely.

In seeking to enhance our theoretical understanding of the operating-financing distinction, and to propose a practical basis for making the distinction in accounting standards, the analysis in this paper proceeds as follows. Section 2 reviews the operating-financing distinction as it exists in current accounting standards, in particular IFRS. This review identifies an anomaly in extant practice, namely that while (in line with investors' demands) there is a requirement to report financing activities separately, there is neither a principles-based statement of why the requirement is considered to be worthwhile, nor a clear and consistently-applied definition of financing to guide how the requirement should be enacted in practice. In other words, while the reporting of financing activities is deemed sufficiently important to be a requirement, accounting standards are unable to explain why this is so or how the reporting should be done.

Section 3 addresses the 'why', by drawing upon Miller-Modigliani and Feltham and Ohlson (1995) ('Feltham-Ohlson') to establish the conceptual basis for the operating-financing distinction, which rests upon the information-usefulness of separating the analysis of value-generation from that of value-distribution.

Section 4 then turns to the 'how'. The starting point is to consider whether practical guidance can be found in Miller-Modigliani and in Feltham-Ohlson, but it is shown that Miller-Modigliani's analysis is too high-level for this

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purpose while Feltham-Ohlson's definition of financing is based upon strong assumptions about measurement that do not stand up to the test of practical applicability.

It is argued the distinction made in IAS 1 (*Presentation of Financial Statements*) between the presentation of operating activity by nature and by function can be used to shed light on the definition of financing activity. This approach leads to two alternative perspectives: financing activity defined by nature, which is the subject of Section 5, and financing activity defined by function, which is the subject of Section 6.

As the literature does not appear to offer a workable definition of financing activity by nature, Section 5 adopts an inductive approach, which leads to a simple distinction between the nature of the operating and financing activities of an entity. Section 6 then analyses the alternative approach of defining financing by function and concludes that while such an approach is inherently entity-specific and therefore defies simple or tight definition, there is nevertheless merit in such an approach when viewed from a user's perspective.

Practical measurement constraints and limitations are then identified and explored in Section 7, which serve to strengthen the case for defining financing by function rather than by nature. The final section of the paper proposes that while a definition of financing activities by nature is relatively objective, reporting by function is nevertheless preferable in practice.

The paper's contributions are fourfold. First, it identifies extant gaps and weaknesses in both reporting practice and academic theory, both of which are underdeveloped. Second, it enhances our theoretical understanding of the operating-financing distinction, which is currently defined in different and unreconciled ways in the literature. Drawing on the difference between the presentation of financial statements by nature as opposed to by function, the paper reconciles the different theoretical implications arising from Miller-Modigliani, Feltham-Ohlson and Penman, with Miller-Modigliani identified as a general model, of which Feltham-Ohlson and Penman are each special cases, which are fundamentally different from one another. Third, the paper provides a foundation for a conceptually-grounded yet practical basis for accounting standard-setters to determine requirements for the reporting of financing activity in the financial statements. Finally, the paper identifies areas for future theoretical and empirical research.

2. The definition and presentation of financing activities in current accounting standards

The financial statements provide the raw material for the operating-financing distinction made in finance theory and in capital market practice. Yet the distinction has only relatively recently become established in the accounting literature (notably in Feltham-Ohlson and in Penman, 2006) and, in spite of the distinction being required by accounting standards, a conceptually-grounded, clearly-described and consistently-applied definition of financing remains conspicuously absent from both International Financial Reporting Standards (IFRS) and US GAAP. For example, there does not exist in accounting standards a clear statement of which balance sheet items should be considered to be part of financing and which should not. The conceptual framework for IFRS is focused on equity rather than on a broader definition of capital employed (IAS, 1989).¹ While equity is described as a source of finance (para. 9), the distinction between equity and liabilities is ambiguously defined and, most importantly for the purposes of this paper, there is no discussion of non-equity financing and hence no attempt to define financing as a category.² While financial assets and financial liabilities are clearly defined in IAS 32 (*Financial Instruments: Disclosure and Presentation*, para. 11), the purpose of this distinction is unrelated to the analytical needs of an operating-financing distinction. IAS 1 (*Presentation of Financial Statements*, para. 82) requires entities to report 'finance costs' in the income statement, but it does not provide a definition.³ IAS 7 (*Cash Flow Statements*) offers somewhat expanded guidance but no greater clarity. It defines the financing section of the cash flow statement to include 'activities that result in changes in the size and composition of the contributed equity and borrowings of the entity' but it leaves borrowing undefined (para. 6). So, too, does IAS 23 (*Borrowing Costs*, para. 5), which provides the circular definition that borrowing costs are costs of borrowing. IAS 7 actually concedes that defini-

¹ The conceptual framework does, however, emphasise the importance of comparability of financial statement data, among entities and over time. In this respect, operating income is an important metric because it allows comparisons that are not distorted by differences in capital structure.

² Ohlson and Penman (2005) provide an extended discussion of the boundary between debt and equity, including (in Section 2) limitations in the treatment of debt-equity hybrid financial instruments in current accounting standards.

³ IAS 18 (*Revenue*, para. 7) does, however, appear to rule out finance costs being reported net of income from financial assets, because revenue is defined to include all gross inflows including interest.

tional issues are unclear. It states that interest paid and received 'are usually classified as operating cash flows for a financial institution' but that there is 'no consensus on the classification of these cash flows for other entities' (para. 33). On the balance sheet, a financing category is not required at all, and so there is no basis for articulation of financing activities across the financial statements. There is also no requirement for consistency of classification. This is true across the financial statements such that, for example, interest expenses classified as financing expenses in the income statement could correspond to operating cash flows in the cash flow statement. Inconsistency is even possible within a given financial statement such that, for example, interest expenses on a zero coupon bond are in effect rolled up into a financing cash outflow, while cash payments for interest expenses are reported within the operating heading.

In summary, while the reporting of financing activities is deemed sufficiently important to be required by accounting standards, these standards do not explain why the requirement exists or how the reporting should be done. Section 3 therefore addresses why the separate reporting of financing activity provides useful information, and subsequent sections address how the reporting should be done.

3. Why report financing activity separately?

There has long been support in the literature for a separate financing category. Paton (1922) advocated placing income tax and interest cost 'below the line' in the income statement. He argued that net revenue (as he called it) should be a return to all capital suppliers, and interest was therefore a distribution of that net revenue to a class of capital suppliers.

The classic theoretical explanation for the usefulness of an operating-financing distinction can be found in Miller-Modigliani. Based upon the assumptions that, first, a company fixes its investment expenditures in each period and, second, financial markets are perfect, rational and certain, Modigliani and Miller (1958) show that the value of the entity, which may be termed enterprise value, is unaffected by the composition of claims to it – i.e. varying capital structure between equity and debt components of capital employed does not create value. Likewise, Miller and Modigliani (1961) show that dividend policy is irrelevant. Value is 'determined solely by "real" considerations ... (ie) the earnings power of the firm's assets and its investment policy – and not by how

the fruits of the earnings power are "packaged" for distribution.'⁴

Miller and Modigliani (1961) show that the equity value of the firm can be expressed in four equivalent ways. The dividend discount model, which expresses equity value in terms of distributions from the company to equity holders (Equation 1 below), is formally equivalent to three other models, which express equity value in terms of, first, free cash flows (Equation 2), second, accounting profits less increases in book values of assets and, third, uniform perpetual cash flows plus abnormal returns from incremental investment opportunities. These final three models all have in common that they measure directly the income generated by the firm's operating activities, independently of how this income is packaged for distribution to providers of finance. Hence Miller-Modigliani show that, in principle, the operating-financing distinction offers two different perspectives on the same data. The operating perspective focuses on the employment of assets in generating returns in the markets for a firm's products and services, while the financing perspective focuses on the sources of finance that support a given level of assets and the returns to those finance providers:

$$v_t = \sum_{\tau=1}^{\infty} \frac{d_{t+\tau}}{(1+\rho)^\tau} \quad (1)$$

$$v_t = \sum_{\tau=1}^{\infty} \frac{x_{t+\tau} - i_{t+\tau}}{(1+\rho)^\tau} \quad (2)$$

where v_t = equity value at time t
 d_t, x_t, i_t = dividends, clean surplus earnings, investment in operating assets for the period $(t-1, t)$
 ρ = risk-free interest rate

A direct implication of Miller-Modigliani for financial reporting is that an income statement should be able to distinguish flows that form part of the return on operating assets (i.e. the operating profits that contribute to the generation of enterprise value) from flows that form part of the return to providers of finance (i.e. distributions of enterprise value). Alternatively stated, if debt and equity can be viewed as fungible, then although financing costs are an expense in calculating profit attributable to equity holders, they are closer in nature to profit

⁴ Given the capital market and certainty assumptions in Miller and Modigliani (1961), there is effectively no distinction between equity and debt. While Miller-Modigliani choose to express Equations 1 and 2 in terms of equity value, it is straightforward to replace equity value and dividends for enterprise value and free cash flow, respectively.

than to other expenses because they represent a return to providers of finance and they are independent of an entity's operating activity.⁵

In order for Miller-Modigliani to derive the primary conclusions of their papers regarding financial policy irrelevance, their restrictive assumptions concerning perfect capital markets are required. In contrast, the aspect of Miller-Modigliani that is of primary relevance for this paper is the conceptual distinction between operating as an income stream and financing as claims on that stream, which does not require the assumptions of perfect capital markets. The point is that operating and financing are different in nature and are therefore modelled separately. In general, the results of an entity's operating activities are corrupted if they are mixed together with the costs of financing those activities. Consider two entities with investments in assets generating 15% returns in a particular product market, and assume that Entity X is entirely equity-financed while Entity Y is 50% debt-financed at a 10% interest rate. Without the separation of financing activity from operating activity, Entity X would report a 15% return on capital while Entity Y would report 20%, with the former reflecting the returns attainable in the product market, and the latter unhelpfully commingling these with the effects of financial gearing.⁶

Beyond the conceptual distinction between operating and financing, a need to report each category separately is reinforced by the typical valuation practice of investors. By the nature of the difference between operating markets, in which goods and services are traded, and financial markets, in which financial claims are traded, the investors' valuation task is in practice often broken down into two components (Feltham-Ohlson, 1995; Rappaport, 1998; Penman, 2006; Koller et al., 2005). The first comprises the activities of the entity for which cash flows must be forecasted and then discounted in order to arrive at a valuation. The forecasting and discounting process is required because the entity trades in incomplete and imperfect markets, in

which the entity's net assets interact with one another in generating cash flows (Thomas, 1969; Beaver and Demski, 1979). These activities contrast with the second valuation component, which comprises net assets that are independent of one another, and are traded in markets that can be characterised as perfect and with objective market prices. For the first component, the valuation task can be summarised in terms of a price-earnings multiple applied to the current earnings generated by the activity, while for the second component, the valuation task can be summarised as a valuation multiple of one applied to the net asset value (Feltham-Ohlson). To the extent that operating activities conform to the first component of the valuation task, while financing activities conform to the second, the separation of operating from financing activities provides useful information to the investor.

This two-part valuation model, which represents a special case of the general Miller-Modigliani distinction, is formalised by Feltham-Ohlson. The Feltham-Ohlson model is consistent with Miller-Modigliani in that operating activities generate net cash flows ('free cash flow') and the financial claims on these cash flows are traded on perfect capital markets, yet Feltham-Ohlson pay more specific attention than Miller-Modigliani to the structure of financial accounting and to accounting policy. They divide net assets between net operating assets and net financial assets, and the free cash flow generated by the former is invested in the latter. In addition, net financial assets are by definition recognised at market value in the accounts (i.e. there is no goodwill), while all other assets and liabilities are classified as net operating assets on the basis that they generate abnormal returns on book value.⁷ So, for example, net operating assets include accounts receivable, inventory, pre-paid expenses, PPE (property, plant and equipment), accounts payable and accrued wages.

In a similar fashion to Miller-Modigliani, Feltham-Ohlson derive two, formally equivalent valuation models, where the first expresses equity value in terms of value distribution and the second in terms of value generation. Specifically, Equation (3) expresses equity value as a function of the present value of expected free cash flows plus the book value of net financial assets, while Equation (4) equates equity value to the book value of net assets plus the present value of

⁵ This ignores the problematic allocation of taxation between operating and financing. A commonly used metric is net operating profit after tax (NOPAT), which equals operating income * (1-tax rate).

⁶ This conclusion holds notwithstanding consideration of market efficiency. This is for three reasons. The first is that clarity of definition and presentation improves the efficiency of market operation; second, to the extent that financing expenses are not separately disclosed, semi-strong form market efficiency with respect to these items is not attainable; and finally, there is evidence that presentation matters, in the sense that financial analysis is influenced by location in the financial statements (Hirst and Hopkins, 1998; Maines and McDaniel, 2000; Tarca et al., 2008).

⁷ Net financial assets are defined to include all recognised assets and liabilities that obey the 'net interest relation' and net operating assets are the residual. The net interest relation is stated as follows: $i_t = (R_t - 1)fa_{t-1}$ where i_t = interest revenue, net of interest expense, for the period (t-1, t).

expected abnormal operating earnings.

$$v_t = fa_t + \sum_{\tau=1}^{\infty} R_f^{-\tau} E_t[c_{t+\tau}] \quad (3)$$

$$v_t = bv_t + \sum_{\tau=1}^{\infty} R_f^{-\tau} E_t[ox_{t+\tau}^a] \quad (4)$$

where v_t , bv_t , fa_t = equity value, book value of net assets financial assets, net of financial obligations, at time t
 c_t , ox_t^a = free cash flow, abnormal operating profit, for the period $(t-1, t)$
 R_f = one plus the risk-free interest rate

Hence Feltham-Ohlson's assumptions regarding the nature of operating and financing net assets enables them to formalise the special case of the Miller-Modigliani operating-financing distinction, whereby the analyst's valuation task divides neatly into a discounted cash flow model for (operating) free cash flow and an aggregation of book values for net financial assets.

In summary, the usefulness in reporting financing activities separately arises because they concern value distribution rather than value generation. Moreover, operating activity is more likely to be modelled explicitly, with financing activity more likely to have a valuation multiple of one. Hence, the investors' primary concern is to understand and model an entity's operating activity, in order to derive enterprise value. These relationships are expressed in general terms by Miller-Modigliani and are tied explicitly to financial statement variables in Feltham-Ohlson.

Having outlined the conceptual basis for an operating-financing distinction (the 'why' in Section 1), Section 4 onwards will now seek to identify a definition of financing that could be applied to the financial statements in practice to determine the operating and financing categories (i.e. the 'how').

4. Towards a practical definition of financing

In Miller-Modigliani, there is a clean, simple distinction between physical operating assets (which are conceptualised as a 'large, composite machine') and the funding provided for these assets in financial markets. By restricting themselves to these polar, straightforward cases, Miller-Modigliani remain silent on how financing activity should be defined in practice. In contrast, Feltham-Ohlson provide a formal definition, whereby debt financing comprises all net assets that are recog-

nised at market value and that generate zero abnormal earnings. This leads to the exclusion of certain liabilities ('operating liabilities') and the inclusion of certain assets ('financial assets'). What Feltham-Ohlson do not achieve, however, is a definition of financing that could be used in accounting standards. Feltham-Ohlson make recognition at market value a basis of classification. In practice, however, the method of accounting for an item does not capture its substance.⁸ Consider, for example, that a bank loan is a source of finance, whether or not it is carried at market value or, conversely, that carrying any given balance sheet item at market value, such as investment property, does not make it a source of finance. Equally, non-value-creating (i.e. zero abnormal earnings) is not, in practice, synonymous with financing. This is most obvious for financial assets classified as held-for-trading, which are typically bought and sold during short periods of time, without significant exposure to market price movements. Trading profits represent margins earned during a period of time, as opposed to passive gains or losses on assets that are held at market value and with the expectation of normal returns. By analogy to a manufacturing company, they can be viewed as inventory rather than as financial assets. In general, one could argue that, for any entity that is focused on maximising shareholder value, all activities are managed with a view to value-creation and so, if non-value-creation is the basis of the financing category, all activities are definable as operating. Why, for example, should an entity's treasury operation not be viewed as a profit centre, when typically it will be managed as such? In short, it seems that neither being recognised at market value nor generating zero abnormal earnings offers an appropriate basis in practice for defining financing. Unfortunately, therefore, the conclusion of this brief discussion is that neither Miller-Modigliani nor Feltham-Ohlson provides a practical definition of financing that could be used in accounting standards: they provide the analysis for why the separate reporting of financing activity is important but they do not answer the question of how it should be done.

In order to address the question of how, the approach that will be adopted here is to consider, from first principles, the nature of financing activity,

⁸ This is a literal interpretation that takes at face value the terminology and descriptions used in Feltham-Ohlson. An alternative view is that the terms 'financial' and 'operating' are terms of convenience for an alternative purpose, namely to illustrate the valuation implications of conservatism in financial reporting.

and to approach a definition of financing inductively. The motivation for this approach is the absence of a practical definition in the literature. The aim is to start by proposing what might be considered a simple and uncontroversial definition of financing, and then, proceeding inductively, to test (and potentially revise and improve) this definition by considering its application in successive, practical settings, which are in various ways more ambiguous than the simplest and least controversial case. In this way, the aim is to develop a robust and practical definition of financing.

As will become clear, this inductive approach will be concerned with classifying financial statement items according to their intrinsic attributes, as opposed to classifying according to the purpose of the financial statement items in the context of the business of the entity. In other words, and adopting the nomenclature that IAS 1 applies to operating activity, the initial concern will be with financing activity defined by nature as opposed to function. To illustrate this difference, consider that a Caterpillar truck is by nature a Caterpillar truck, yet its function within a construction company leads it to be classified as PPE, while its function within Caterpillar's accounts leads it to be classified as inventory. The nature is the same; the function varies. IAS 1 applies the nature-function distinction to operating activity. It lists raw materials, staffing costs and depreciation as examples of expenses by nature, and cost of sales, selling and administrative expenses as examples by function.

Section 5 will adopt an inductive approach to defining financing activity by nature, and Section 6 will consider the application of a functional definition to financing activity.

5. Defining financing activity by nature

An inductive approach requires making an observation as a starting point, which is then tested against further observations as the basis for developing understanding. As applied here, the initial observation will be the basic defining characteristics of a simple case of financing activity, namely a bank loan to, say, a manufacturing company. The defining characteristics of this simple case will then be tested against less straightforward cases.

With a bank loan, the nature of the activity is that one entity (the bank) provides finance to another entity (the manufacturing company) because it loans the use of an economic resource in the expectation of, first, the return of the resource at some point in the future and, second, a return on the loaned resource to compensate for the time value of money and risk. There are, therefore, three elements

to this initial observation concerning the nature of financing activity, which are the loaning of resource, the expectation that the resource will be returned and the expectation that the loan will be appropriately compensated.

A less straightforward case arises if there is a loan of resource but the counterparty is not a bank or other financial institution. Would this change the initial observation regarding the nature of financing activity? A case that can be applied here is a pension obligation, for which the counterparty is employees rather than a bank. A defined benefit pension plan involves the entity deferring settlement of an amount equal to the service cost, incurring interest costs thereon and then repaying the amount owed in the form of a pension. In principle, employees could accept immediate settlement of services rendered instead of entering a pension agreement, and an entity could achieve this immediate settlement by borrowing, with the net effect that the entity substitutes a bank loan for a pension obligation. Either way, the existence of the liability is associated with future interest costs and repayment of capital, and there is a clear distinction between the expenses relating to operating activity (i.e. the service cost that gives rise to the liability) and the method by which these expenses are financed (either by employees or by the bank). A similar argument can also be made for cases other than pension obligations, such as provisions for deferred tax, where the counterparty providing finance (i.e. accepting deferred settlement) is the government. For some other provisions, such as those for asset retirement obligations, a clearly identifiable counterparty might be absent: an entity's current operating activity gives rise to a current obligation to incur future cash outflows, but payment will eventually be made to an entity that is not yet known. The absence of a current counterparty does not, however, change the conclusion that the entity's operating activity is being financed by means of deferred settlement. Interest costs are recognised purely as a consequence of this deferral, and not as a consequence of further operating activity, and the situation is no different in substance from a bank loan: the carrying amount of the provision equals the amount that the entity would need to borrow in order to settle its obligation, and the unwinding of the discount rate is equal to the interest costs that would be incurred on the amount borrowed.

The earlier, initial observation concerning the nature of financing activity included the expectation that a loan is appropriately compensated. What, then, is the nature of a loan of resource if there is no

explicit compensation? A case in point is accounts payable to a supplier of materials, where there is typically repayment of the amount owed but not interest thereon. It would, at least in principle, be possible in this case to separate the total cost of the materials into two components – the value of the materials at the point of purchase, and a return to compensate for the time value of money and risk associated with the deferred settlement of accounts payable. These two components are unlikely to be transparent in practice, but as economic fundamentals dictate that the supplier has to recover the full cost of the goods provided, the amount charged to the customer must in general exceed the value of the materials if there is delayed settlement, and the extra amount must be an increasing function of the settlement period. In other words, the difference between this case and a bank loan is one of form rather than substance: there is not separate recognition of the cost of finance, but the cost is still there, and so in both cases there is a provision of finance.

There is perhaps another way, however, in which the case of accounts payable differs from that of a bank loan, which is that an entity seeking to raise finance would typically go to a bank and not to a supplier. Alternatively stated, a bank loan is raised for the purpose of funding operating activity while accounts payable are the outcome of operating activity. The only two ways to increase accounts payable are, first, to defer payment, which risks damaging supplier relationships or, second, to order more goods or services. In general, an entity's ability to raise or settle different forms of liability varies. Just as accounts payable are typically not increased in order to raise finance, so the option to settle certain other liabilities, such as obligations for asset retirements or pensions, may not exist. Whether a given liability can readily be increased or decreased does not, however, change the nature of the liability itself. The existence of the liability implies a loaning of resource, an expectation that the resource will be returned and an expectation that the loan will be appropriately compensated.

In summary, the defining characteristics of the simple bank loan appear to hold in cases where the counterparty for the loan of a resource is not a bank, where there is no explicit compensation for the loan, and where the origination of the loan is a result of operating activity rather than the result of an active raising of liquid funds. There may be other cases that have not been considered here, and an inductive approach cannot claim to be definitive, but the discussion here does not change the initial characterisation of financing activity as the loaning of resource, with an expectation that the resource will

be returned and appropriately compensated. It is therefore concluded that, if financing activity is defined by nature, all liabilities meet the definition of financing.⁹ A corollary is that, in the income statement, all expenses, gains and losses on liabilities are by nature financing, because they represent a change in an entity's economic obligation to its providers of finance. For example, if an entity revises the estimated cash outflows (or discount rate) for its pension obligation, this is by nature a financing gain or loss because no operating activity has taken place (the employee has not provided any further service) and the only change is in the estimated settlement amount of a financing arrangement entered into in a previous period. In substance this is similar to a loan renegotiation.

This discussion of reporting financing activity by nature can now be contrasted with the alternative approach of reporting by function.

6. Defining financing activity by function

While IAS 1 provides illustrative examples of the nature-function distinction, it is noteworthy that these examples are restricted to operating activity and that there is no indication that the distinction is also applicable to financing activity. Yet the distinction is actually not only applicable but also insightful. This can be illustrated by comparing a manufacturing business with a retail bank. The manufacturer generates a return on operating assets and incurs costs of finance. The bank shares these characteristics, yet it differs in that its primary focus is the net interest margin. Its assets and liabilities are managed jointly and the inherent profitability of the business cannot be understood independently of its sources of finance. Interest paid is a financing expense by nature for both the manufacturer and the bank, but for the bank interest paid is the functional equivalent of cost of sales. A similar conclusion holds for the increasing number of companies that own financial subsidiaries. For insurance companies, it is the liabilities that can be viewed as the core business. Even for a business such as retail, the analyst is seeking to understand the entity's value drivers and will find it instructive to know that working capital financing requirements are low,

⁹ The conclusion that all liabilities are a source of finance is not intended to imply that all sources of finance are necessarily actually recognised. A separate issue from that of definition is recognition, for which the first test is whether the definition is met, but which also requires, first, reliability of measurement and, second, mechanisms to ensure that items meeting definition and recognition criteria do not remain off-balance sheet. This paper addresses the issue of definition, and not recognition, and so items recognised under existing accounting standards are taken as given.

because the turnover of inventory and receivables is higher than that of payables. Indeed, the extent to which forecasts for an entity's assets are offset by accounts payable might be modelled as a function of forecasts for costs of goods sold, such that changes in accounts payable form part of expected free cash flow from an entity's operating activities. Similarly, payments in advance (initially recognised as liabilities) can be critical to the profitability of producers of capital goods with long operating cycles, and so while by their nature they provide finance, they are nevertheless better understood by their function within the entity's business model.

It was noted in Section 3 that a general reason to report financing activities separately is that they concern value distribution rather than value generation. It was also noted that operating activity is more likely to be modelled explicitly, with financing activity more likely to have a valuation multiple of one. Hence, the investors' primary concern is to understand and model an entity's operating activity, in order to derive enterprise value. Yet the discussion here introduces a difficulty, namely that sources of finance need not be independent of the entity's business model but rather an integral part. In such cases, a given liability is jointly informative about the inherent profitability of the business and also about the way in which the business is financed, and modelling the value-determinants of the operating activities of the business requires taking into consideration sources of finance. In short, classifying financing activity by nature (i.e. including all liabilities) might inhibit the predictive value of financial statement information by reporting outside operating items that are essential to understanding and forecasting the entity's business.¹⁰

This conclusion is consistent with Penman's (2006) model, in which the functional dimension is dominant. Penman's distinction between operating and financing is defined in terms of, on the one hand, trading activity with customers or suppliers and, on the other hand, transactions with financial markets that are independent of the entity's trading activity.¹¹ In other words, it is the type of counterparty that determines the classification of any given

transaction, e.g. a bank is the counterparty for a loan (which is a financing item) whereas a supplier is the counterparty for an account payable (which is an operating item).

Penman's distinction applies to all balance sheet items, regardless of whether they are assets or liabilities. Investments in financial assets are argued to be no different in substance from repayments of financial liabilities, since both are transactions with financial markets, both impact net financial assets and both are independent of customers and suppliers (cash and other liquid assets are viewed simply as 'negative debt').¹² This presents a sharp contrast with the above definition of financing by nature, under which assets of any type cannot be considered to be financing because they are a deployment of resource by an entity, leading to a generation of value, not a supply of resource by a financier, in return for which there is a distribution of value.

Net operating assets can include liabilities, such as accounts payable and pension obligations, if the source of these liabilities is transactions with customers or suppliers and if an understanding of the value generated by operations would be incomplete without consideration of these items. While it is helpful in practice that valuation can be relatively straightforward for financial assets (because they are typically independent of one another and often traded in liquid markets, with readily available market values), this benefit is almost incidental in Penman's model and it is not relevant whether recognition is at market value. The primary distinction is whether activities are relevant to understanding the entity's sources of value-generation.

Penman's distinction carries over from the balance sheet to the flow statements. In the cash flow statement, for example, it is likely to be the case that operating cash flows are almost exclusively concerned with trading activity with customers and suppliers, while financing cash flows correspond to activities in financial markets. Investing cash flows, in contrast, are a hybrid category, when viewed from a functional perspective. For example, IAS 7 (para. 16) includes within the investing category 'cash payments to acquire property, plant and equipment, intangibles and other long-term assets' (which are likely to correspond to operating/value-creating activities) and also 'cash payments to

¹⁰ Equally, an investor's forecasts for an entity's bank borrowings can be modelled in the context of the entity's capital structure, with a focus on how the net operating assets are financed, at what cost of capital and with what level of pay-offs to which claimants. This modelling would take as given, and derived by separate analysis, a set of assumptions regarding the trading activities that determine the level of net assets to be financed and the associated returns and risks.

¹¹ The debt holder does take an active interest in the entity's business as a means of judging whether or not financing obligations will be met, but this can be viewed as an indirect, informational interest.

¹² To the extent that there is an interest rate spread between assets and liabilities, and also to the extent that the net asset position is imperfectly hedged, there is a difference in substance between a gross debt and a net debt position with the same net obligation.

acquire debt and equity instruments of other entities' (which could be either a part of treasury activities, and so financing, or alternatively strategic investments in other entities, and so a part of operating activity).

From a standard-setter's perspective, a difficulty with Penman's model, or with any other functional presentation, is that it is inherently entity-specific and so defies a standardised definition. If (following Penman), a definition is proposed such as 'financing activities exclude transactions with customers and suppliers', then it becomes necessary to define customers and suppliers, yet because these are inherently entity-specific, a standardised definition is not possible to obtain. Likewise, financing activities cannot be defined narrowly as, for example, 'capital-raising activities in capital markets'. Aside from the issue that capital-raising need not take place in capital markets (consider, for example, finance leases), such activities could be part of the operating activity of the entity (this applies, for example, to wholesale funding in retail banking).

Consider also the challenge in defining which assets can be functionally defined as financing. It is not a simple matter to draw a line around the assets that can be viewed as a part of net debt (i.e. those that offset borrowings), and those that cannot, and any definition could either be too broad or too narrow. A definition of financing assets that included only cash, for example, would be too broad if some of the entity's cash was not available to repay debt but was instead held to meet the operational needs of the business (for example, in retail operations). On the other hand, the definition would be too narrow if an entity's treasury operation invested surplus liquid assets in non-cash financial instruments, such as marketable securities. Similarly, some entities might manage investments in associated companies much as they would manage investments in liquid financial assets, while others would regard associates as fully integrated with the operating business. A similar definitional issue might arise also for accounts receivable, which would in turn be complicated further by varying degrees of willingness to securitise. For some entities, financial assets (or liabilities) can include derivatives held for the purposes of hedging financing activities, while for other entities the same derivatives could be held for speculative purposes. There is a grey scale, running through entities holding limited surplus cash, through those holding significant portfolios of liquid assets, through those for which financial activity forms a significant (though not dominant)

part of the overall business, to financial institutions, for which there is little non-financial activity. In general, the relationship between an entity's treasury activities and its operating activities will differ across entities, making impossible a consistently meaningful, standard definition of financial assets for inclusion in net debt.¹³

In general, any approach that is taken to defining financing by function is inescapably imprecise. For example, financing activities could be viewed as originating from an inflow of resources to the entity. The underlying assumption is that if a third party provides resource to an entity, then the function of the transaction is to provide finance, whereas if a liability arises because the settlement of a business expense is deferred, then the fact that financing arises is secondary to the originating business activity. This would result in asset retirement obligations and other such provisions being excluded from financing activities. In practice, it would mean that if the debit entry is an operating expense, then there is an operating liability, but if the debit is to assets, then the liability is financing. Yet there are difficulties in allowing the method of accounting to determine the classification in this way. For example, should deferred revenue or accounts payable be viewed as financing liabilities, even though the debit entry is an inflow of resource? And is interest payable an operating liability because the debit entry is an expense, or deposits for a retail bank financing because they provide an inflow of resource?

In short, any attempt to define financing activity by function cannot get around the challenge of entity-specificity, meaning that the definition must remain subjective and must be interpreted through the eyes of management.¹⁴

7. Measurement issues

Further issues for standard-setters in defining financing arise from difficulties of measurement. These are of two types. The first is that there is not always separate calculation of the operating and financing components of changes in net assets.¹⁵ Perhaps the best example is payments to suppliers.

¹³ This is the corollary of the problem that 'operating' cannot be defined in a standardised way for all entities (Barker, 2004).

¹⁴ The subjectivity arising from entity-specificity is not an unfamiliar issue in financial reporting, and it affects balance sheet classification and asset valuation in a variety of ways, for example, concerning the classification of financial instruments under IAS 39 and the measurement of depreciation of specialised assets under IAS 16.

¹⁵ There is not even necessarily recognition of assets and liabilities themselves, and so the measurement issues discussed here do not address off-balance sheet items.

As outlined above, there are in principle two distinct components to these payments, which are the transaction value at the point of purchase (which is the cost of the resource consumed) and the difference between this value and the actual settlement amount (which is a cost of finance). Yet, in practice, this distinction is rarely made, and the supplier's credit terms are typically rolled up into a single amount. While it would be possible for accounting standards to require the separate calculation of all financing expenses, the current absence of such a requirement means that an entity's operating profit includes suppliers' return on finance. For the sake of consistency between the income statement and the balance sheet, accounts payable should therefore also be classified as operating. If they were not, measures of return on capital employed would be artificially low. Conceptually, if financing activity is defined by nature, classifying accounts payable as operating would be the wrong answer, but practically it would at least be internally consistent.¹⁶ It would not be the wrong answer, however, according to a functional perspective on financing activity. Indeed, the absence of a separately reported financing expense can be viewed as evidence that the underlying function is not financing. The case for the functional perspective is stronger still if standard-setters also seek to achieve consistency with the cash flow statement. Consider, for example, an asset retirement obligation. The liability is by nature a source of finance, which results from an operating expense and which increases as financing expenses (interest costs) are incurred. The cash settlement of the liability does not distinguish, however, between the operating and financing components of the liability: there is not an operating cash flow separate from a financing cash flow.

The second measurement difficulty concerns the extent to which the allocation of amounts between operating and financing can be determined reliably. With pension obligations, for example, it is argued above that the service cost is an operating expense, while the resulting liability (and associated interest cost) is financing. This simple treatment is complicated, however, by actuarial gains and losses. If an entity revises the estimated cash outflows for the pension obligation, then this is arguably a financing expense, because the employee has not provided

any further service and the only change is in the estimated settlement amount of a financing arrangement entered into in a previous period.¹⁷ A difficulty, however, is that actuarial gains and losses resulting from changes to cash flow estimates can be viewed as inseparable from the initial estimate, because the subjectivity of this initial estimate is unavoidably high. And if the distinction between the initial (operating) expense and the subsequent (financing) gain or loss is not reliably measurable, then neither is it entirely meaningful. Additionally, the distinction would allow management the opportunity, in part at least, to determine subjectively the split between operating and financing. This difficulty is greater still for certain other liabilities. In the pension case there is a clean distinction between, first, the point in time at which employee services are rendered and the financing liability incurred and, second, all subsequent changes to the liability. In contrast, a liability such as that for an asset retirement obligation might change because initial estimates are revised (in principle, a financing expense) and also because further operating activity generates a new liability (in principle, an operating expense). Separating these two components is unlikely to be straightforward.

These concerns over measurement reliability might suggest that the gain or loss from revised cash flow estimates should be reported as operating, yet the same would not be true for a gain or loss from revisions to expected discount rates, which are the capitalised counterpart of the current period's interest costs and so are not candidates for inclusion in operating profit. It might seem possible to finesse this problem by splitting gains and losses according to their source (i.e. whether due to revisions to cash flows or discount rates), but this creates two problems of its own. First, since the overall value change in the liability is determined jointly by revisions to both cash flows and discount rates, the two effects could be separated only by an arbitrary allocation rule. Second, the balance sheet and the income statement would not be aligned, because gains or losses on a single balance sheet item would be reported in both operating and financing. If, for example, the liability is classified as operating in the balance sheet but gains or losses from changes to discount rates are reported as financing, then the reporting would show returns to providers of

¹⁶ The capitalisation of interest raises similar issues. In this case, the financing expense is recognised separately, but that as a consequence of capitalisation and amortisation it becomes 'hidden' within operating profit, leading to the same difficulty of inconsistency where operating profit is understated in relation to capital employed.

¹⁷ The argument used here is similar to that in IFRS 2, *Share-based Payment*, where for stock options the amount initially recognised as an expense is the fair value at the grant date, while any subsequent value change is an equity dilution and not a true-up of the original expense.

finance yet no corresponding financing liability in the balance sheet.

The key question here, for liabilities initially recognised as a result of an operating expense, is whether measurement is sufficiently reliable for all gains and losses to be reported as financing. If not, and if consistency across the financial statements is desired, then the liability, gains and losses on the liability, cash settlement of the liability, and also interest costs, should all be reported as operating. The suggested inclusion of interest costs in operating may seem surprising, but if the liability is not classified as financing, then neither are the returns to the creditor returns to a provider of finance.¹⁸ Again, the consequence of measurement difficulties is to provide additional support for defining financing by function rather than by nature. It is as a consequence of interaction between operating and financing activities that measurement complications arise and it is therefore possible to address these complications by restricting the financing category to cases where the function of the activity is financing alone.

8. Conclusions

This paper is motivated by the observation that while investors find useful a distinction between financing activities and other (operating) activities of a reporting entity, neither academic theory nor accounting standards offer a clear definition of financing activity, nor a consistent articulation of its conceptual foundation or practical application.

Miller-Modigliani provide the seminal conceptualisation of the distinction between operating (i.e. value-generation) and financing (i.e. capital contribution and value-distribution, including equity and, interchangeably, other sources of finance). From a financial reporting perspective, however, Miller-Modigliani's contribution is limited because their papers are silent on issues of the structure and content of financial statements. Application to financial reporting is instead particularly associated, in the academic literature, with the work of Feltham-Ohlson and Penman, which can both be viewed as special cases that make operational Miller-Modigliani's general model.

Feltham-Ohlson and Penman present very different interpretations of financing activity. Feltham-

Ohlson define financing activity by nature, while Penman's definition is by function. Feltham-Ohlson's definition rests upon the method of accounting, whereby any asset or liability with a valuation multiple of one is deemed to be financing, independent of its function. This focus on accounting method rather than on the substance of the underlying item offers limited practical insight or application. This paper therefore derives, through an inductive approach, an alternative definition of financing activity by nature, according to which there is financing activity when there is the loan of resource, the expectation that the resource will be returned and the expectation that the loan will be appropriately compensated. According to this perspective, all liabilities are by nature financing activity, while assets cannot be financing activity.

In contrast with Feltham-Ohlson's definition, which is shown to be precise but of limited value, Penman's definition of financing is shown to be imprecise, but for reasons that are unavoidable. The imprecision arises because the function of any given financial statement item can vary according to an entity's business model, meaning that an item with a given nature might be classified by function as operating for one entity but financing for another. This inherent variability makes impossible a precise definition of financing activity by function. In practice, there are three differences between the definition proposed in this paper of financing activity by nature and a functional approach, which are that the latter: (1) excludes certain liabilities from financing activity if their primary function is deemed to be operating; (2) includes certain assets within financing activity if their primary function is deemed to be financing (i.e. if they form part of a net debt position); and (3) allows management to determine, according to their own interpretation of their entity's business model, where the functional dividing line lies between operating and financing.

It would be conceptually defensible to present financing activity either by nature or by function, yet they are mutually exclusive alternatives and so it is necessary to determine which, in practice, should have primacy. In exploring which approach is preferable for financial reporting practice, the paper explores both conceptual and practical arguments for and against each.

A definition of financing activity by nature appears at first sight well-suited to accounting standards because it has a clear conceptual foundation and a relatively objective definition, in contrast with a definition by function, which is unavoidably subjective and therefore defies tight

¹⁸The effect of this treatment would be similar to that arising if the provision was not recognised in the first place. For example, an operating expense of 100 in year 1, together with recognised interest over two years of 20, would be sufficient to settle an obligation of 120 in year 3; so, too would be an operating expense of 120 in year 3. In both cases, the total operating expense is 120.

definition and standardisation. Notwithstanding these benefits, this paper proposes reporting by function rather than by nature. This is because investors' primary concern is to understand and model an entity's operating activity, in order to derive enterprise value. Hence, for activities that form part of an entity's business model and that are also a source of finance, it is the former attribute that should be dominant. It is incidental, for example, that retail deposits are by nature part of the financing of a bank, because the investor instead models them first and foremost as a part of operating activity. Moreover, not all liabilities are best viewed as sources of finance interchangeable with equity or debt. If, in these cases, the liability arises as a consequence of operating activity and is not simply and only a source of finance, then it is incidental that it provides finance, and of greater importance that it forms a part of operations. Finally, practical issues arise if financing expenses are not separately disclosed and/or if the initial recognition of the liability contains sufficient measurement uncertainty that the reporting of subsequent gains or losses as financing would be misleading. A simple way to avoid these measurement difficulties is to treat all such activities as operating, which is equivalent to adopting a functional approach.

The risk with a subjective, functional approach is that there is an increased opportunity for discretionary reporting and for the reduction of consistency and comparability. In response to these concerns, and with the aim of helping users to assess the extent of management discretion, an accounting standard could impose two controls. The first of these would be a requirement that an entity's choice of items to include as operating as opposed to financing be declared as a matter of accounting policy. The second control would be a note to the accounts that reconciled financing activity defined by nature with the amounts reported by function on the face of the financial statements, thereby highlighting management's financial reporting choices in defining financing activities.

There are two distinct avenues for future research that follow from these conclusions. The first concerns the broader analysis of nature versus function in financial reporting, while the second concerns empirical testing of the operating-financing distinction.

This paper has employed the distinction between nature and function as a mechanism for, first, better understanding and reconciling the operating-financing distinction in the extant literature and, second, identifying conceptual aims and practical

constraints in implementing the operating-financing distinction in practice. The opportunity exists to apply the nature-function dichotomy to also shed light on other areas of financial reporting. The dichotomy exists explicitly in IAS 1, which allows a choice between nature and function in the presentation of operating activities. Yet, in similar vein to the operating-financing distinction, the choice in IAS 1 is neither conceptually-grounded nor defined clearly enough to be satisfactorily operational. To illustrate, there are arguably components of financial performance, such as disposal gains or losses, actuarial gains or losses, or goodwill impairments that cannot, in principle, be reported by function because they do not serve a functional purpose within the reporting entity, yet IAS 1 does not raise such issues, leaving the requirement to report by function with no clearly articulated purpose or method. At least IAS 1 does acknowledge the nature-function distinction, however, which contrasts with other areas of financial reporting. In the area of measurement, the fair value model of SFAS 157 adopts a market participant's perspective, which explicitly disallows valuation of the function that the asset is intended by management to serve within the reporting entity, preferring instead to capture the nature of the asset, independent of context. In contrast, the deprival value algorithm addresses the alternative values for the asset in its current context, therefore taking explicit account of the asset's functional role in generating value for the business. In general, the choice between nature and function is pervasive in financial reporting and it impacts our ability to conceptualise and to satisfy the purpose of financial statements, yet for the most part it remains unexplored in academic research.

The issue of empirical testing of the operating-financing distinction is perhaps the more obvious of the two implications for researchers from this paper. There are two possible lines of enquiry. The first is the issue of whether financial statement presentation matters, in the sense that users are misled by where items are reported in the financial statements. Efficient markets theory would suggest that they should not be misled, while the implication of the evidence on comprehensive income in Hirst and Hopkins (1998) and Maines and McDaniel (2000) suggest that, notwithstanding efficient markets theory, presentation does actually matter. The second potentially fruitful area for research concerns the scope for discretionary and opportunistic reporting, and the associated loss of comparability, that results from a functional model. Such work would extend the literature that has

developed around voluntary disclosure and earnings management (e.g. Defond and Park, 1997; Healy, 1985; Kasznik, 1999). The outcome of such work could serve to either reinforce or qualify the proposal in this paper to report financing activities by function.

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