Valuation - General[1][2]

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This Valuation E-Book is reviewed and updated from time to time based on changing Macro-economic and Industry conditions. Readers are directed to the date this E-Book was last updated, and should read it with reference to that date.

Executive Summary

Anyone investing or trading in shares of a public company in essence is 'buying that company' and holding their ownership interest in it until they sell. In a perfect world such a person would be able to access and analyze the same information available to Takeover Experts and Corporate Acquirers. 'Takeover Experts' include Financial Intermediaries, Investment Bankers, Private Equity Investors, Public Accountants, and so on. Importantly, *investors and traders in public market securities, Investment Advisors and Securities Analysts* (referred to herein collectively as 'Public Market Participants') *have access only to publicly available information. As a result they typically have less than complete information available to them when they invest, trade, or in the case of Securities Analysts prepare their reports and recommendations. The information they don't have often is as important as the information they do have when developing comprehensive, meaningful valuation determinations.* The fact that Public Market Participants most often do not have important and relevant information available to them is not a criticism of them. This results from prevailing Securities Laws that are outside their control.

This E-Book reviews and discusses:

- fundamental valuation principles;
- valuation concepts;
- information availability in the context of fundamental differences between Public Market Participants and Corporate Acquirers;
- Analyst Reports in the context of what Investors need to know;
- Shareholder Rights important to all Public Company shareholders;
- Company specific financial ratio analysis; and,
- the shortcomings of 'comparables analysis', a technique adopted by many Public Market Participants.

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[1] The views expressed herein are those of the author. They are offered to readers for information and general guidance only. Nothing in this document is intended, and should not be taken, to constitute investment advice.

[2] For a comprehensive discussion of Share and Business Valuation see *The Valuation of Business Interests, Ian R. Campbell and Howard E. Johnson, The Canadian Institute of Chartered Accountants, 2001*, available through the websites of either Campbell Valuation Partners Limited www.cvpl.com, or The Canadian Institute of Chartered Accountants www.cica.ca. Canadian lawyers, public accountants, and persons giving share and business valuation advice broadly adopt that book as a reference text

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Valuation Principles

The following principles are based on a combination of economic theory, open market reality, prevailing jurisprudential precedent, and common sense.

Share and Business Value is Point in Time Specific

Businesses are constantly changing as a result of acquisitions or sale of business segments and as a result of changes in product lines, management, financing arrangements, market conditions, general and business specific economic conditions, industry and competitive conditions, and so on. Such changes typically lead to changes in share and business value. Hence, share and business value is point in time specific.

In broad terms, the 'enterprise value' of a business is comprised of the sum of the redundant assets of the business (i.e. net assets excess to the going concern value of the operating assets of the business) and the present value of all future expected pre-interest after-tax discretionary cash flows expected to be generated by business. Simplistically, 'equity value' is equal to 'enterprise value' less all interest bearing debt. Pre-interest after-tax discretionary cash flow is defined as prospective cash flow from operations less income taxes thereon, net non-cash working capital requirements, and sustaining capital investment requirements net of the related income tax shield.

The Market Dictates the Appropriate Rate of Return

Prevailing market forces dictate the appropriate rates of return to be applied when determining share and business value. These market forces include:

- macro-economic, country and local economic conditions, including short and long-term borrowing rates;
- perceived business specific risk; and,
- the number of purchasers in the market for a particular business, and the motivations and investment philosophy of each.

In a share and business valuation context, the prospective after-tax discretionary cash flows of a business and the rate of return applied to those cash flows are interdependent. All things equal, the greater the risk of realizing the anticipated prospective discretionary cash flows, the higher will be the required rate of return and vice versa.

Share and Business Value is Influenced by Underlying Net Tangible Asset Value

All things equal, the existence of higher underlying net tangible asset value measured in terms of both value in use (i.e. going concern value) and liquidation value supports higher going concern value than would otherwise be the case. As a practical matter, in buoyant economic times and times of industry consolidation risk comparisons based on tangible asset backing tend to be seen as less important than they are in less buoyant times.

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Commercial and Non-Commercial Value are Distinct Concepts

The prospective discretionary cash flows of a business may or may not be dependent upon the ongoing personal characteristics of specific executives. Where prospective discretionary cash flows accrue:

- irrespective of the involvement of specific individuals, any intangible component of share and business value generally is saleable; and,

- all or in part directly as a result of the non-transferable characteristics or abilities of specific individuals, the intangible component of share and business value may not be saleable.

Share and Business Value is Influenced by Liquidity, where Liquidity is defined in terms of the Number of Interested Prospective Purchasers for the Shares or the Business

All things equal, greater liquidity decreases risk, which in turn leads to higher share and business value. Vendor(s) of businesses typically maximize proceeds by prioritizing (by reference to purchaser specific synergies) and canvassing as many prospective purchasers as possible, thereby attempting to maximize sales proceeds. By soliciting numerous prospective purchasers, the price fetched for the business is likely to be greater than it otherwise would be.

In a stock market context, investors (and traders) as a general rule enjoy liquidity proportional to the average daily or weekly trading volume of the specific stocks they hold – i.e. the greater the average share trading volume the greater the liquidity of any particular shareholding, and vice versa.

Control vs. Minority Shareholdings

A control shareholding can be represented by an individual shareholding, by a combination of shareholdings of different outstanding share classes beneficially owned by the same owner that together constitute control, or by a grouping of shareholdings each of which by itself would not constitute a control position. A control shareholding carries sufficient votes to be able to elect a majority of the members of the Board of Directors and, through them, govern the business, determine the timing and quantum of dividend distributions, and determine the timing of the sale of the business. All other shareholdings typically are referred to as minority interests.

Absent a Shareholder/Ownership Agreement, or legislation or jurisprudence (i.e. Court adjudicated legislative intent) that dictates otherwise, the value of a controlling interest in a business generally has a greater value per share than does a minority shareholding in that same business viewed in isolation. In a stock market context, this ‘lower value’ reflected in normal daily trading prices can be said to be the corollary of a takeover premium.

In theory there are two separate components of a discount from pro-rata value, being a ‘discount for non-control’ and a ‘discount for illiquidity’. Conceptually, discounts for non-control relate to restrictions imposed by law, contract or circumstance on a shareholder that influence the risk and return parameters of a given shareholding. Discounts for illiquidity relate to the inability of a shareholder to deliver to a purchaser an investment that is immediately liquid.

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Assets vs. Shares

As a general rule, an arm's length purchaser will pay a higher price for all of the underlying net assets of a going concern than it will for all of the outstanding shares of the company that operates that going concern. This is because following the acquisition of net assets the purchaser:

- in some jurisdictions (Canada being one) enjoys greater post-acquisition cash flows related to income tax laws that enable a step up in the cost base of the underlying depreciable assets, and hence in many income tax jurisdictions enhanced post-acquisition capital cost allowance claims, and the ability to amortize the amount paid for intangibles;
- generally does not assume liabilities other than those specifically agreed to; and,
- does not inherit liabilities detached from the assets that are purchased but that are direct or contingent obligations of the vendor company.

Valuation Concepts

The following is a summary of Share and Business Valuation concepts important to persons who buy and sell publicly traded securities:

- the difference between being an investor and being a trader. While there is no 'hold-period' that characterizes one as an investor or a trader, in general it can be said that investors do not attempt to 'time the market' through periods of stock market and specific share price volatility, as contrasted with traders who do;
- the distinction between values that are developed in a 'notional (or hypothetical) market context' and prices developed in an 'actual transaction market context'. Future publicly traded share price targets established by analysts are 'notional' valuations, whereas the day to day trading price of a normal sized trading lot is to be a current 'actual transaction price'. Likewise, the price paid by an arm's length acquirer in a takeover of a public company is an 'actual transaction price', even though such a price likely will be higher than the 'actual transaction price' that occurred on the trading day before the transaction was announced. An offering price made in a 'related party transaction' is a 'notional' valuation prepared pursuant to independent valuation. In simple terms, a related party transaction is one where a party 'related' at law to another party makes an offer to that other party to purchase their shares or assets. By way of example, the offer made in September, 1995 by Ford Motor for the outstanding shares it then did not own in Ford Canada, a company whose shares were traded on the Toronto Stock Exchange, was a 'related party transaction';
- the distinction between 'intrinsic value' and 'takeover price'. 'Intrinsic value' is defined as '*value determined based upon rates of return required by investors given economic and business conditions existing at the valuation date, without consideration of possible synergies or economies of scale that might accrue in differing degrees to arm's-length purchasers*'. It often is referred to as 'standalone value'. Any value developed assuming a business will continue to function under existing ownership control 'as is' with the same management, physical assets, distribution system, etc. in place is an 'intrinsic value', and not a 'takeover value'. In contrast, at any given point in time a 'takeover value' can be expected to be in excess of 'intrinsic value' because arm's length purchasers:

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- ✓ likely can generate 'economies of scale' or 'synergies' pursuant to combining their existing businesses with the purchased business as a result of generating greater market penetration, cost savings, production and operating efficiencies, business risk mitigation, and so on, and
- ✓ may be able to access financing on favourable terms not available to current owners.

This distinction may be blurred in the context of the price at which any given public market security trades, since at any given point in time the trading price of the shares of a specific public company may or may not reflect takeover speculation on the part of investors, traders and their investment advisors;

- there are fundamental differences between the public equity markets and the market for all of the outstanding shares, the net operating assets, or control of a publicly-held or privately-held business. In particular:
  - ✓ public market participants have a wide range of time horizon objectives (from a few minutes to many years), whereas strategic purchasers of a controlling interest in either a public or private company tend to be long term holders. As a result, stock market prices in part represent transaction prices between minority shareholders with relatively short investment time horizons. Corporate acquirers, in contrast, generally have long-term investment time horizons. Financial purchasers of controlling interests may or may not be long term holders,
  - ✓ stock prices can fluctuate erratically within a short time period based on investor sentiment,
  - ✓ public equity market data represents normal sized lots of public company share trading prices where there may be significant differences between companies as to the comparative degree of share liquidity,
  - ✓ stock market transactions generally are based on available information that typically does not include important strategic and other 'insider' information not publicly disclosed, and
  - ✓ an open market transaction generally is characterized by lengthy negotiations between (largely) fully informed parties, which negotiations generally influence price. This is not the case in a stock market transaction where the ultimate transacting parties seldom directly interact and, in the case of normal sized trading lots, rarely have a significant impact on price;
- utilization of public equity market data is in large part based upon an assumption and acceptance of the 'efficient market theory' (which postulates that all relevant information already is priced into the financial markets), and in any event is dependent on stock market prices at a point in time. As a result, it is influenced by stock market 'errors' in valuation;
- when determining acquisition price, Corporate Acquirers and their advisers typically test their proposed offering price by attempting to model how Public Market Participants will value for their shares for stock market purposes on a post-acquisition basis. If they conclude that their share price may be favourably impacted by the transaction, that transaction will be deemed an 'accretive' transaction and the proposed offer will be positively influenced by this analysis. On the other hand, if they conclude that their share price may be negatively impacted by the transaction, the proposed offer may be negatively influenced by this analysis;
- as a result of lack of close comparability, public equity market valuations typically require subjective adjustments to be made either to the financial data of the 'comparables' or that of the subject business to account for differences in strategy, product offerings, financial structure, operating structure and so on;

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- comparative public market analysis depends on market multiples to reflect forecasted revenue growth, gross margins, operating costs, income taxes, profit growth, capital expenditures, working capital requirements, redundant assets, and so on. In contrast, the DCF and capitalization methodologies segregate, analyze, and utilize an indicated or a multiple year forecast of all of these things determined on a fact-specific basis;

- comparative public market analysis typically does not segregate redundant assets from operating assets. These two asset categories typically face different risks and are dealt with separately pursuant to the DCF and capitalization methodologies;

- the aggregate after-tax cash flow generated by a business typically has both a non-discretionary and a discretionary component. Non-discretionary after-tax cash flow (often referred to as ‘sustaining capital reinvestment’) is defined as that component of the aggregate after-tax cash flow that must be reinvested to sustain current levels of cash flow generation. As such, this cash flow component does not provide the business owner(s) with a return on investment. The business owner’s return on investment comes from the remainder, or discretionary component (i.e. ‘free cash flow’ component’), of the aggregate after-tax cash flow. The discretionary cash flow component can be withdrawn from the business without impairing prospective operating results, or alternatively can be reinvested in the business to generate growth;

- takeover bids are negotiated between parties with differing knowledge, post-transaction synergy opportunities negotiating abilities, and financial strength. Accordingly, such transactions may or may not be consummated at the highest available prices and indeed sometimes may be consummated at unrealistically high, non-economic, prices;

- a sale of a company’s treasury shares that results in an incremental cash infusion is a ‘primary offering’ of shares, whereas a sale of previously issued shares by a shareholder to another party commonly is termed a ‘secondary offering’ of shares. In the case of a:

  - ✓ primary offering, the share sale proceeds accrue to the company that issues the shares, and thus at the time of the offering typically enhances the *en bloc* value of the issued shares – as contrasted with the per share value which may or may not be altered by the offering. The percentage interest of existing shareholders is diluted by the newly-issued share capital, and

  - ✓ secondary offering, the share sale proceeds accrue to the vending shareholder, and as such have no effect on the en bloc value of the issued shares of the company, and in theory no effect on the per share value before or after the secondary offering. No dilution of any share interest takes place, and no funds accrue to the company;

- the concept of ‘fair value’ in the context of what in Canada are referred to as minority shareholder ‘appraisal remedies’ and ‘oppression remedies’ – see *Shareholder Rights* following.

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Information Availability – A Fundamental Difference between Public Market Participants and Corporate Acquirers

Public Market Participants need to do much the same analysis as do Corporate Acquirers purchasing 100% of a company. However, a principal difference has to do with information available to each. In this regard:

- information can be segregated into four distinct categories:
  - ✓ information that resides in the Public Domain, including such things as all company Press Releases, Annual and Quarterly financial reports, Management Discussion & Analysis documents, and so on; and industry studies and company specific studies prepared by analysts and others that are made available on the Internet and elsewhere,
  - ✓ industry studies, analyst reports and similar documents that are prepared by Investment Banks and others and made available to their institutional and retail investor clients. Such documents often find their way to the Internet or are otherwise circulated, and in any event are documents in the Public Domain for Securities Law purposes. This information may not be available to all Public Market Participants,
  - ✓ industry and company specific general knowledge, operating knowledge and personal knowledge derived by Public Market Participants and Corporate Acquirers from their own individual business experience and acumen. So far as such knowledge does not include information that would be deemed to be insider information under prevailing Securities Law, this type of information can be used by those who have it, but cannot be said to be 'in the Public Domain' per se, and
  - ✓ company data known to a Company's Board of Directors, Management or employees that would be deemed to be insider information under prevailing Securities Law. This information is not in the Public Domain, is not available to Public Market Participants, but is known to Company Insiders. Insiders with knowledge of material undisclosed information may not trade in the Company's securities nor may they disclose such information except in the necessary course of the Company's business. However, such information may become known to those interested in acquiring the Company (and their advisors) pursuant to due diligence investigations conducted subject to Confidentiality and related Agreements;
- Corporate Acquirers and their advisors, pursuant to their execution of Confidentiality Agreements, Non-Disclosure Agreements, and Stand-still Agreements may be given direct access to:
  - ✓ the Directors and Executives of the Target Company. These persons provide detailed responses to requests for information made by the Corporate Acquirer with respect to the Target Company that is both *in the Public Domain* and *not in the Public Domain*, and
  - ✓ all documentation in the Target Company's possession related to the Target Company's assets, liabilities and historic and prospective operating revenues, expenses, cash flows, and so on that is both *in the Public Domain* and *not in the Public Domain;*

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- in order to ensure completeness of Target Company information received both verbally and by electronic or hard copy document, Corporate Acquirers and their advisors typically employ what commonly are referred to as 'Due Diligence Questionnaires' or 'Due Diligence Checklists'. These questionnaires are either generic or specifically developed in the context of the Acquisition being analyzed. Exceptions occur in circumstances where a Corporate Acquirer makes an unsolicited or hostile takeover bid for the shares of a Public Company. In those circumstances the Offeror Company relies on information in the Public Domain and whatever information they are aware of based on their own industry knowledge and operating experience;

- in contrast Public Market Participants have access, pursuant to prevailing Securities Laws, only to information made publicly available by the Companies whose securities are analyzed ('*Information in the Public Domain*'). Information not made publicly available commonly is referred to as '*Insider Information*'. The important distinction between *Information in the Public Domain* and *Insider Information* is conceptually similar from Jurisdiction to Jurisdiction; and,

- a further 'information base' distinction can be made with respect to Information in the Public Domain, since as a result of analyst's ongoing contact with Company Management, mine and plant tours organized by management, and so on, they may have insight into information in the Public Domain that other Public Market Participants (i.e. institutional and retail investors and Investment Advisors) may not have. These insights presumably then are reflected in Analyst Reports, which in turn may not be generally available to all Public Market Participants.

Following from this:

- at any point in time, other than in the case of unsolicited takeover bids or hostile takeovers the detailed information available to a Corporate Acquirer and their Advisors with respect to a target company's assets, liabilities and historic and prospective operating revenues, expenses, cash flows, and so on may be more extensive (perhaps significantly so) than is the information available to Public Market Participants; and,

- whereas individual Public Market Participants may use a form of Research (i.e. 'Due Diligence') Questionnaire or Checklist in their analysis not all do, and there is no known 'recognized standard' questionnaire available to them.

Analyst Reports – What Investors Need to Know

Well researched and documented Analyst Reports are useful tools to assist investors in better understanding value parameters adopted by analysts for a particular industry or for specific companies, and *in particular for providing investors with knowledge of the subject company that they otherwise do not know – or might cause them to do additional research based on the facts, suppositions, and assumptions stated by the analyst(s).* Such reports also are useful in that they provide views as to perceived market direction and target prices for shares of specific companies. On the other hand, poorly researched and documented Analyst Reports obviously are not useful tools for investors, and can be misleading. However, in all circumstances they may *provide investors with knowledge of the company being analyzed that they otherwise do not know, and hence for that reason alone may prove valuable.*

Having said that, investors should read and draw conclusions from Analyst Reports with a cynical eye, having regard to financial and other relationships that exist or prospectively may exist between the subject company and the Analyst's employer, the industry and industry operating experience of the analyst – which industry operating experience or lack thereof typically is not set out in detail in such reports.

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When reviewing Analyst Reports, investors should keep at least the following things in mind:

- Securities Analysts do not have access to the same complete corporate information that is available to Corporate Acquirers and their advisers. Analyst opinions must be conditioned by that and read as such, even though Analyst Reports typically do not state this on their face;

- Analyst Reports typically do not set out the theoretical and practical strengths and, more importantly, weaknesses inherent in the valuation methodologies they adopt, or their employment of those valuation methodologies. In some instances, one or more of the methodologies adopted in an Analyst Report may be of little merit or weight – see *Valuation Methodologies* following;

- Analyst Reports often do not clearly set out the specific reasons companies have been selected as 'peer group' companies. Such reports also often do not clearly set out the basis of the asset, liability, income, and cash flow components that have been adopted for the subject company and for those companies taken to comprise that company's 'peer group'. That is to say, Analyst Reports frequently fail to spell out the basis of:

  - ✓ the value of the asset components they analyze – e.g. are the assets taken at reported book value (for accounting purposes), or have they been restated to replacement value or to 'value in use',

  - ✓ identification of assets redundant to the operations of the business,

  - ✓ the value of the liability components they analyze – i.e. in the case of interest bearing debt, has the principal value of interest bearing debt been adjusted to account for the difference (if any) between the contractual interest cost on that debt and current market interest rates for identical debt,

  - ✓ the income flow they analyze, in particular whether they have adjusted any historic income flows that have been relied on for non-recurring income and expense items, and

  - ✓ of particular importance, the basis of any prospective cash flows adopted in their analysis in the contexts of whether those cash flows are inclusive or exclusive of sustaining capital investment, and whether those cash flows have been income tax effected – i.e. it is not always made clear in Analyst Reports that the analyst(s) is relying on 'gross cash flow before income tax' at one extreme, or on 'free cash flow after income tax' at the other extreme. Rather the reader may be left to interpret this through deductive reasoning;

- as a result of lack of close comparability, public equity market valuations typically require subjective adjustments to be made either to the financial data of the 'comparables' or that of the subject business to account for differences in strategy, product offerings, financial structure, operating structure and so on. This may or may not be well done in any particular Analyst Report; and,

- Analyst Reports may or may not adjust peer group multiples for comparability issues, which they typically should do.

Following from this, Investors should read Analyst Reports carefully and with an eye to the merit of the analysis they contain, and not simply adopt the target stock prices typically set out in them as necessarily being meaningful or reliable in the context of their fundamental underpinnings.

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Shareholder Rights

The following is a broad discussion of currently prevailing Canadian Law. It is provided for information only. It should not be relied upon in the context of any contemplated, pending, ongoing investment or trading in publicly traded securities, or litigation. Persons considering exercising such rights in respect of either Canadian incorporated companies or companies incorporated outside Canada should seek the advice of corporate and litigation attorneys in the relevant jurisdiction of incorporation.

In Canada, companies are incorporated pursuant to both a Federal and individual Provincial and Territorial Business Corporations Acts, which Acts accord certain basic rights to both majority and minority shareholders. The interpretation and application of these Acts is guided by judicial interpretation. Certain provisions in these Acts somewhat mitigate against the degree to which minority shareholders are 'disadvantaged' in the face of controlling shareholders than otherwise would be the case. In a public company context in Canada, shareholder's rights generally include:

- specification of the rights and entitlements of each authorized class of shares;
- conditions and restrictions for the transfer of issued and outstanding share capital;
- shareholder's rights as to participation in corporate decisions, including:
  - ✓ procedural requirements related to the conduct of regular meetings,
  - ✓ specification of transactions that require direct shareholder's approval, either by simple or special majority,
  - ✓ provisions related to the requisitioning and content of extraordinary shareholders meetings, including the percentage shareholder's approval required to effect so-called special resolutions (generally either 2/3rds or 3/4ths) and the availability of separate class voting provisions, and
  - ✓ entitlement to cumulative voting to determine the composition of the Board of Directors;
- related to the election of the Board of Directors and the powers conferred on the members of the Board, including the number of Directors to be elected, the number of Directors constituting a quorum, the qualifications necessary for election, the powers of the Directors and any restrictions thereon, the duties and liabilities of the Directors, and whether the Chairman has a casting vote in the event of a tied vote;
- regarding access to specified corporate information such as financial statements, corporate records, and listings of shareholders; and,
- those that arise in the event of a takeover bid for the shares of the company. For example, in many Canadian jurisdictions, a so-called compulsory acquisition provision gives an acquirer of at least 90% of the share capital of a corporation the right to acquire the remaining shares.

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Importantly, in addition to the aforementioned shareholder's rights, the various corporation statutes generally also provide:

* a right to dissent from 'corporate actions' in certain prescribed circumstances. This right (an 'Appraisal Right') enables a shareholder to require the company in which he or she holds shares to purchase them at 'fair value', where the company initiates certain 'fundamental changes' from which he or she dissents;

* the right of a minority shareholder (and sometimes other parties) to exercise a so-called oppression remedy (an 'Oppression Right') where the affairs of the company have been conducted to the prejudice of that party's interest;

* the right to apply to a court for an order liquidating or dissolving the company where the affairs of the company have been conducted to the prejudice of a minority shareholder's interest;

* the right to bring a derivative action, being a suit brought by a person in the name of, and on behalf of, the corporation to remedy a wrong done to the corporation. If the corporation has been wronged by the majority, a statutory derivative action allows the minority to seek leave (or permission) to prosecute or defend an action on behalf of the corporation;

* the right to apply to a Court for an investigation order to collect evidence where corporate wrongdoing is suspected; and,

* the right to apply to a Court to compel the corporation to rectify its corporate register or records.

Of particular interest are the Appraisal Remedy and the Oppression Remedy, which enable minority shareholders to in the case of:

- the Appraisal Remedy to withdraw from the corporation at 'fair value' as determined by Canadian Courts, rather than be subjected to 'fundamental' changes proposed by the majority. Broadly speaking, these fundamental changes include passage of amendments to the Corporation's Articles of Incorporation changing the share structure or restricting its business activity, an amalgamation with an arm's length corporation, change of corporate jurisdiction, or sale, lease, or exchange of all, or substantially all, of the Corporation's assets. With some exceptions, in the context of Appraisal Right litigation where the Corporation's shares are not actively traded, Canadian Courts have interpreted 'fair value' of minority shareholdings to mean a pro-rata portion of the 'en bloc' value of all of the outstanding shares of the Corporation, as appropriately allocated by separate outstanding share classes. Important exceptions to this interpretation of 'fair value' have occurred where the Courts have concluded that the public market price is representative of 'fair value' where public market trading of the Corporation's shares is neither 'thin' nor 'sporadic'; and,

- the Oppression Remedy to request the Canadian Courts to intervene (or to remedy a demonstrated unfairness) in the affairs of the Corporation so as to protect shareholders who believe a majority shareholder has acted in a manner prejudicial to their interests. Simply stated, the Oppression Remedy is a comprehensive protection designed to provide relief to most kinds of corporate unfairness, but is only available in situations involving corporate acts or conduct of Directors, and not in respect of shareholders acting in their capacity as shareholders. As in the case of the Appraisal Remedy, Canadian Courts to date have interpreted 'fair value' of minority shareholdings to mean a pro-rata portion of the 'en bloc' value of all of the outstanding shares of the Corporation, as appropriately allocated by separate outstanding share classes. However, Canadian Courts appear to have left open the possibility of awarding a discounted amount where the actions of the shareholders bringing the action warrant such treatment.

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Company Specific Financial Ratio Analysis

Important financial and stock market relationships that need to be closely considered and compared – typically against an industry standard and 'peer group' companies – include the following. Where the term 'equivalent production' is adopted it means conversion of all minerals produced to equivalency production of the principal mineral produced.

Balance Sheet Relationships

The Balance Sheet should be the starting point in any reasoned share valuation/pricing exercise. This is because the balance sheet provides a reading on whether the company has sufficient cash on hand to ensure its ability to fund near-term planned operations without having to revert to the market (which typically is dilutive to existing shareholders) or borrow (which alters financial risk). Simply put, the balance sheet enables one to understand company financial risk at a point in time and ultimately to reflect that risk in one's value/price assessment. Important Balance Sheet relationships include:

- cash & cash equivalents;
- cash & cash equivalents/interest bearing debt;
- working capital ratio;
- interest bearing debt;
- interest bearing debt & equivalents/total capitalization;
- interest bearing debt & preferred shares/common share equity; and,
- total assets/shareholder's equity.

Capital Expenditure Relationships

Capital expenditure relationships are an important measure of the company's activity. Full disclosure segregates total capital expenditures in any reporting period between sustaining capital reinvestment and capital invested in growth. Mining explorers typically would have virtually no sustaining capital reinvestment, whereas mining producers typically would have. In the case of mining explorers capital expenditures, and in particular capital expenditure budgets should be continuously compared with cash on hand in order to assess on an ongoing basis the likelihood of new share offerings that would be dilutive to existing shareholders. Important Capital Expenditure relationships include:

- capital expenditures, latest quarter;
- capital expenditures, trailing 12 months;
- capital expenditure budget, current fiscal year; and,
- % capital expenditures/after-tax cash flow trailing 12 months.

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Revenue Relationships

Revenue relationships viewed in the contexts of historic and prospective company specific trends and 'peer group' comparisons are important and clearly bear on value/price at any given point in time.

Important Revenue relationships specific to Small Cap Mining Producers include:

- average sales price – oz of metal produced.

Important Revenue relationships specific to Small Cap Oil & Gas E&P's include:

- average sales price - crude oil ($/bbl);
- average sales price - natural gas liquids ($/bbl); and,
- average sales price - natural gas ($/mcf).

Important Revenue relationships specific to Small Cap Oil & Gas Service Companies include:

- revenue trends by product or service offering; and,
- forecasted revenue by product or service offering.

Cost Relationships

Cost relationships viewed in the contexts of historic and prospective company specific trends and 'peer group' comparisons are important and clearly bear on value/price at any given point in time.

Important Cost relationships specific to Small Cap Mining Producers, Oil & Gas E&P's, and Oil & Gas Service Companies include:

- gross margin by product or service offering; and,
- gross margin trends by product or service offering.

Important Cost relationships specific to Small Cap Mining Producers include:

- trailing 12 month reported cost per ounce of production of principal metal produced;
- the trend in historic annual reported cost per ounce of production of principal metal produced;
- latest current fiscal year forecast cost per ounce of production of principal metal produced;
- cost recoveries from production of secondary metals; and,
- annual corporate overhead as a % of equivalent ounces of production.

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Important Cost relationships specific to Small Cap Oil & Gas E&P's include:

- cash (operating) costs per BOE produced;
- general and administrative expenses per BOE produced; and,
- annual finding costs per BOE produced.

Profitability Relationships

Like cost relationships, profitability relationships viewed in the contexts of historic and prospective company specific trends and 'peer group' comparisons are important and clearly bear on value/price at any given point in time. Profitability relationships are not relevant to Mining Explorers who have no revenues. Important Profitability relationships include:

- EBIT-DA (earnings before interest, income taxes, depreciation and amortization);
- EBIT (earnings before interest and income taxes);
- after-tax earnings;
- trailing 12 month EBITDA/trailing 12 month interest expense;
- trailing 12 month EBIT/trailing 12 month interest expense;
- interest bearing debt/trailing 12 month after-tax cash flow;
- trailing twelve month free cash flow/trailing twelve month interest expense; and,
- debt coverage – times interest earned.

Return on Investment Relationships

At any point in time these relationships are important on both a company specific basis and in the context of 'peer group' comparisons. Return on Investment relationships are not relevant to Mining Explorers who have no revenues. Important Return on Investment relationships include:

- trailing twelve month return on assets; and,
- trailing 12-month return on equity.

Production Relationships

At any point in time these relationships are important on both a company specific basis and in the context of 'peer group' comparisons.

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Important Production relationships specific to Small Cap Mining Producers include:

- trailing 12 month ounces of equivalent production;
- the trend in historic annual ounces of equivalent production;
- latest current year forecast ounces of equivalent production;
- trailing 12 month ounces of equivalent production/market capitalization; and,
- latest current year forecast ounces of equivalent production/market capitalization.

Important Production relationships specific to Small Cap Oil & Gas E&P's include:

- % increase (decrease) in BOE daily production;
- BOE production;
- BOE behind pipe; and,
- BOE production plus behind pipe.

Wells Drilled Relationships

In the context of Small Cap Oil & Gas E&P's at any point in time these relationships are important on both a company specific basis and in the context of 'peer group' comparisons. Important Wells Drilled relationships include:

- wells drilled – net; and,
- % net wells drilled success rate.

Reserves and Reserve Life Relationships

At any point in time these relationships are important on both a company specific basis and in the context of 'peer group' comparisons.

Important Reserves and Reserve Life relationships specific to Small Cap Mining Explorers and Producers include:

- latest reported proven reserves;
- latest reported proven and probable reserves; and,
- latest reported proven, probable and inferred reserves.

Important Reserves and Reserve Life relationships specific to Small Cap Oil & Gas E&P's include:

- proven reserve life index;
- proven plus probable reserves/reserve life index;
- latest reported proven reserves;

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- latest reported proven and probable reserves;
- latest reported proven, probable and inferred reserves;
- the trend in historic annual year-end reported proven reserves;
- the trend in historic annual year-end reported proven and probable reserves; and,
- the trend in historic annual year-end reported proven, probable and inferred reserves.

Stock Market Price Relationships – Enterprise Value and Market Capitalization Relationships

At any point in time these relationships are important on both a company specific basis and in the context of ‘peer group’ comparisons.

Important Enterprise Value and Market Capitalization relationships include:

- enterprise value/trailing 12 month EBIT-DA;
- enterprise value/trailing 12 month EBIT;
- enterprise value/trailing 12 month After-tax Earnings;
- market capitalization/trailing 12 month After-tax Earnings;
- market capitalization/latest quarter reported book equity (net asset value);
- market capitalization/latest quarter reported tangible book equity;
- latest reported proven reserves/market capitalization;
- latest reported proven and probable reserves/market capitalization;
- latest reported proven, probable and inferred reserves/market capitalization; and,
- latest current year forecast ounces of equivalent production/market capitalization.

Important Enterprise Value and Market Capitalization relationships specific to Small Cap Oil & Gas E&P’s include:

- market capitalization/latest quarter BOE exit rate;
- latest reported proven reserves/market capitalization;
- latest reported proven and probable reserves/market capitalization; and,
- latest reported proven, probable and inferred reserves/market capitalization.

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Stock Market Price Relationships – Market Price Comparisons

At any point in time these relationships are important on both a company specific basis and in the context of 'peer group' comparisons. Important Market Price Comparison relationships include:

- market capitalization;
- closing price change - %;
- trailing 20 day volatility;
- trailing 60 day volatility;
- trailing 90 day volatility;
- trailing 12 month average daily trading volume;
- % trailing 12 month average daily volume/average 12 month basic no. of common shares o/s;
- % change in market capitalization – year/year; and,
- % change in common share price – year/year.

Many of these comparators can be found for the companies whose data is embedded in the StockResearchPortal.com website. Those comparators that currently are not included in the website will be added over the next few months.

Comparables Analysis

Comparative analysis utilizes key operating ratios and multiples of what are thought to be similar businesses or so-called 'peer group companies'. These indicators then are applied to the historical and projected financial relationships of the subject business when assessing value relationships, and to assist in determining appropriate rates of return. Ratios and multiples generally are derived from available stock market data, from public financial disclosures of so-called comparable publicly traded companies, and from data from recent open market transactions involving similar companies. Ratios and multiples commonly reviewed include:

- financial operating ratios with respect to liquidity, financial and operating leverage, profitability and efficiency;
- equity value measured in relationship to each of earnings, discretionary cash flow, book value, and net tangible assets;
- enterprise value measured in relationship to revenues, EBIT-DA, and EBIT; and,
- for certain industries, ratios such as enterprise value per dollar of revenue, per ton of capacity, per customer, or some other performance or industry specific value indicator commonly used by Securities Analysts, Transaction Experts, or Corporate Acquirers.

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To qualify as comparable, a business must be in the same business, undertake the same and only the same business functions, and have the same risk profile as the subject business. When selecting companies that are comparable, consideration should be given to factors such as:

- company size assessed in terms of revenues, net assets, operating capacity, number of employees, and other meaningful measures;
- products or services offered and geographic coverage, market characteristics, and market share;
- degree of vertical integration;
- cost structure and financial structure;
- quantum of net tangible assets and annual sustaining capital reinvestment;
- historic growth and stability of profitability and discretionary cash flow, and profitability and operating measurements;
- quantum of annual research and development expenditures; and,
- strategic direction and focus.

As is evident from a review of the foregoing list, sufficient information usually is not available to reach an informed conclusion as to the degree of meaningful comparability between two businesses. As a result, comparative analysis rarely is used as a primary valuation methodology by other than Securities Analysts, but rather is used to test value conclusions otherwise determined. Further, even where applied as a test methodology, such tests may not be meaningful. However, that is not to say that comparisons between companies in the same industry that exhibit similar characteristics should not be compared by balance sheet and financial ratios, stock market metrics, and so on. They should be so compared – but largely in order to determine which of those companies appear to be more attractive than their contemporaries from a possible investment point of view. Once that is determined the company(ies) deemed most attractive then can be analyzed in depth – the comparisons with their contemporary companies being only one factor to be weighted in any decision as to whether or not to invest.

Having said that, where companies considered appropriate for comparability purposes have been identified, adjustments to the stated financial results of those businesses may be necessary to enhance comparability. Required adjustments may include:

- accounting policies, where they differ between the subject company and the ‘comparables’ selected;
- income tax rates;
- financial structure (i.e. mix of debt and equity); and,
- forecasts, to conform to both normalization and common application of GAAP.

In most cases, the detailed data required to make the appropriate adjustments is not available. *Where the differences could be significant, this militates against meaningful comparability*.

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Benchmark Analysis

Financial and operational data of so-called 'comparables' sometimes is used to assess how the performance of the subject business compares to 'normal' or 'industry-standard' measures. The applications of benchmark analysis may include:

- determining an 'appropriate' industry or business specific capital structure and notionally applying it to the subject business;
- evaluating the adequacy of the net non-cash working capital of the subject business and making notional adjustments where necessary; and,
- assisting in assessing the relative strengths and weaknesses of the subject business and the reasonableness of its projected operating results.

Public Equity Market Analysis

As a general rule, at any given point in time, public equity markets record public expectations of both general economic and specific industry conditions through both broad and industry specific market indices such as prevailing price to earnings and enterprise value to EBIT-DA multiples.

The use of so-called 'comparable' public market multiples is popular among Securities Analysts preparing research reports and stock recommendations. Analysts often identify what they take to be a company's peer group of publicly traded companies, and assess why the stock being analyzed should trade at a higher or lower multiple of earnings (or some other measure) than its peers.

Transaction Comparison Analysis

It sometimes is beneficial to identify and analyze recent transactions where the acquired company is perceived to be a so-called 'comparable' company. The identification and analysis of such transactions may provide insight as to the:

- relative degree of liquidity in a given industry;
- perceived risks and rates of return of corporate acquirers;
- most likely buyers and post-acquisition synergies that might be expected; and,
- price range competitors might bid for a business.

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Although data derived from an analysis of transactions involving ‘comparable companies’ may provide such insights, its direct application to any particular minority shareholding or en bloc valuation determination rarely is possible because:

- sufficient information normally is not available to fully understand the valuation dynamics of the business acquired;
- each open market transaction is unique; and,
- an open market transaction price normally is comprised (either implicitly or explicitly) of the perceived intrinsic value of the acquired firm plus, in varying degrees, purchaser perceived post acquisition synergies.

As a general rule, only in limited circumstances can the results obtained from analyzing data of so-called ‘comparable’ companies be meaningfully applied when determining business value other than as a ‘test of value’ otherwise determined, and to provide a general understanding of the risk-reward dynamics of a given industry.

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