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A Newsletter by Zeppelin Real Estate Analysis Limited of the Zeppelin Group
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SARS No More: Hong Kong has been taken off the list of travel advisory and warning, and a recent large scale crowded civic march event involving half a million people proves the point = Hong Kong is SARS safe and no one was infected during the event. On another note, Hong Kong has just signed a Closer Economic Partnership Arrangement (CEPA) agreement with the Mainland that may imply more business interactions and opportunities for Hong Kong companies in Mainland China. Globally, the USA has slashed interest rates again and it seems its economy is at a crossroad between recovery (reflation) and recession based on published news and reports. Most of Europe and Japan continue to perform weakly.

In this Issue:

We are very honored to have Mr. Lawrence Pang, FRICS, FHKIS MBA CFA, an experienced practicing chartered surveyor and one of the few surveyors to also have a CFA designation in Hong Kong, to share his experience and views with us on valuation techniques. We would also like to hear from prospective readers / writers who wish to share their real estate knowledge and experience with us.

This quarterly (January, April, July and October) newsletter is circulated freely via email to over thousands of readers including real estate developers, investors, owners, users, financiers, top executives, senior managers, prominent academics and related professionals from Hong Kong and abroad. Our content is / has also been published in newspapers and web portals such as **China Daily**, **Hong Kong Economic Journal** (a Chinese daily), **21st Century Business Herald** (China), **MITCRE Alumni Newsletter**, the **Surveying Newsletter** of the Hong Kong Institute of Surveyors, **Centanet.com, Netvigator.com, Hongkong.com, E-finet.com, Red-dots.com, Realtradex.com, FrogPondGroup.com, Icfox.com**, **PacificProperties.net**, **Soufun.com** and **House18.com**. We had also been quoted in the **Asian Wall Street Journal** and interviewed by **Radio Hong Kong**. We also publish monthly articles and analyses in the months between. This newsletter is now into its **7th year** and **26th** issue.

We also operate a website www.real-estate-tech.com through which we intend to share some of our real estate knowledge and ideas with interested parties. We also make available charts, tables, spreadsheets, reports, and the like for reference, the majority of it being free with some requiring a token fee.

Zeppelin Real Estate Analysis Limited is involved in real estate development, investment, and asset management with a focus on **independent analysis**, investment strategy, and portfolio management. It can also assist in setting up real estate analytical computer systems, software applications and content development. It is part of the Zeppelin Group of Companies which collectively also offers project management, facility management, marketing management, architecture, and capital management services.

Excess Earnings Method and Economic Profit
Real Estate Tech, July 2003
By Invited guest writer Mr. Lawrence H. C. Pang, FRICS FHKIS MBA CFA
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The excess earnings method is a commonly used business valuation technique, in particular for valuing the collective intangible value in the nature of goodwill of a business. In the U.S., this valuation method is sometimes called the formula approach because it was originally adopted by the U.S. Treasury Department since 1920 in connection with business valuations for taxation purposes.

In essence, the excess earnings method appears as a variation of the normal income capitalization approach of valuation method. The basic assumption underlying the excess earnings method is that business profit in excess of a "normal" rate of return on tangible assets is produced by intangible assets. These "excess earnings" can then be capitalized into intangible value or goodwill. The following are the general steps used in applying the excess earnings method:

1. Determine the value of the tangible operating assets and liabilities.
2. Determine a normalized level of operating profit that should fairly reflect the probable future earnings of the business in question, sometimes referred to as "economic earnings".
3. Determine the fair rates of return for the net tangible operating assets. These rates are used to calculate a return on tangible assets component, often referred to as the interest on capital, which is subtracted from the representative operating profit in Step 2 to derive "excess earnings".
4. Determine the required rate of return for the excess earnings which are supposed to be derived from the intangible asset. Capitalize the excess earnings by this rate will give the intangible asset value, or "goodwill". The total business value can then be found by combining the value of the goodwill with the net tangible asset value determined in Step 1, i.e.

$$V = Capital_0 + \text{Present Value of Excess Earnings}$$

One can see from above that the same considerations apply with respect of the selection of the net income and capitalization rates in the normal income capitalization approach. Similarly, this technique focuses on the operating earnings of the business and the net operating assets which are used to generate those earnings. However, the selection of the two or more direct capitalization rates is critical to the validity of the result of the excess earnings method. It is also for this reason that this method of valuation receives the greatest criticism. Arguably, the greatest difficulty in rate selection is obtaining that one overall encompassing rate rather than finding individual defendable rates applicable only to certain segments of the appraisal subject.

Despite the above criticism, the excess earnings method conforms to the concept of real profit proposed in 1890 by the famous British economist, Alfred Marshall. In his landmark text, *Principles* of *Economics*, Mr. Marshall wrote: " What remains of his profits after deducting interest on his capital at the current rate may be called his earnings of undertaking or management."

Based on Mr. Marshall's statement, it is evident that the economists' interpretation of profit should be the residual income or economic profit as defined today as opposed to the accounting profit. By the definition of economic profit, a company is not truly profitable unless its revenues have not only covered production and operating expenses, but also when the company's profits are sufficient enough to provide its owners with an opportunity cost of capital.

$$\text{Economic Profit}_{(t+1)} = \text{Economic Earnings}_{(t+1)} - (r \times Capital_{(t)})$$

where r = fair rates of return of capital invested

Nowadays, economic profit is known by many "trade" names. For instance, Edwards and Bell (1963) and Ohlson (1992) both call it residual income, Stern Stewart (1991) calls it EVA, McKinsey & Company (1995) calls it the economic profit model, and Palepu et al. (1997) call it abnormal earnings though they may have different definitions on the earnings, the capital based and its fair rate of return.

Anyway, in contrast to the normal income capitalization approach as well as to the other similar approaches under different trade names, the excess earnings approach recognizes that different risk levels may attach to underlying tangible asset value versus the intangible asset value of a business operation. Given the presumption that the risk attaching to intangible assets is higher than the risk attaching to tangible assets, capitalization rates related to the former would always be higher (multiples lower) than the capitalization rates assigned to earnings/cash flow related to tangible assets

Apart from being a primary valuation technique, the excess earnings approach may also be used to test the conclusions derived by other approaches. For instance, where the excess earnings method produces a value higher than was previously calculated under a normal income capitalization approach, it may indicate that insufficient emphasis had been placed on the underlying asset values when selecting a single capitalization rate. Conversely, where the excess earnings method produces a value lower than that calculated under a normal income capitalization approach, it may indicate that not enough recognition was given to a relatively high implied intangible value when selecting a single capitalization rate.

Another application of the excess earnings approach as a test method is to use it to “force out” the implied rate of return on intangible value inherent in the initial value conclusion. After completing a single capitalization rate calculation, a rate of return on tangible assets is determined. The components of the excess earnings approach are used to determine the rate of return on the intangible value. This implied rate of return is then assessed for reasonableness in its own right and as compared to the selected return on tangible assets.

While some analysts argue that the excess earnings method is more appropriate when a business has a material investment in tangible assets, the excess earnings method converges with the normal income capitalization method when the business to be valued has only a minor tangible investment, i.e. an overwhelming portion of the total earnings become excess earnings. If this is the case, most of the criticisms directed at the excess earnings method should disappear.

Asia REITS Are Viable

Real Estate Tech, July 2003

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The recent use of a (Singaporean) Real Estate Investment Trust (REIT) vehicle by a prominent publicly listed (property) group to offload some of the retail properties in Hong Kong prompted discussions on the prospects of REITS in Asia and the opportunities that Hong Kong may seek to capture. While it is not the intention here to discuss the merits of the particular deal, **we do think that REITS are viable in Asia for the following reasons**:

A) **REITS** = to recap, this involves taking a portfolio of real estate assets (or mortgages) and securitize them for acquisition by investors large and small. This has been going on in North America and to a certain extent Australia for quite some time and is now beginning to pick up in Asia, such as Japan and Singapore. REITS also tend to enjoy some tax privileges too.

B) **Asia investors are likely to be receptive toward REITS** = as many are middle-class, professional, well educated, and have gained foreign-global business and investment experience via trade and family ties. With proper promotions from investment banks, plus information on REITS being readily available through the web, REITS can expect a receptive audience and should offer an additional investment choice.

C) **Asia investors are plenty** = of the world's 6B+ people, around 55% reside in Asia. Even if only 5% of these end up as investors of REITS, we are still talking about some 170M people (and Japan alone has a population of 120M).

D) **Asia's relatively high savings rate implies a huge potential (untapped) pool of capital** = it is often reported that savings rate may range between 10% to 20%, though observably one may also argue that (some) youths in Asia today seem more consumption orientated and thus may save less. Nonetheless, the REITS at this point in time are likely to target their parents or even grandparents. For illustration, in Hong Kong there are on average some HK$3,000B in bank deposits, which are not amounts to smear at even if one discounts those portions originating from overseas.

E) **Asia's graying populations in the more advanced economies and cities** = while Asia as a collective region is comparatively young, several of its more advanced economies such as Japan, Singapore, and Hong Kong have graying populations similar to those in the West. As the baby-boomers get older, they may prefer steadier (with regular dividends / income) and safer investments, and thus REITS may offer such a good investment alternative.

F) **Asia has the necessary real estate products (properties)** = while the more matured economies such as Japan, Singapore, and Hong Kong offer a range of existing properties, younger emerging ones will ensure a reasonable supply of future property pools from which to pick. Based on construction volumes, several Asia real estate markets compare well with the major ones in the West.

G) **Asia offers market diversity** = apart from the degree of market maturity, the markets also differ in scale and economic cycles, socio-culture, governmental efficiency, and real estate opportunities. Thus, a range of REITS with different focuses or themes (e.g. a SE Asia theme, or a China Grade A office focus) can be developed to suit various investor preferences, and even for investors to better balance the risk in their portfolios.

H) **Asia has the necessary financial, legal, and REITS marketing / distribution networks** = naturally this does not apply to each and every economy / city, yet Tokyo, Singapore, Hong Kong, and the like are generally trusted and offer such infrastructures and capabilities, and may help manage portfolios in other economies as well.

In short, Asia has the demand (from prospective investors), the supply (of real estate assets), and the market infrastructure (legal, financial networks) to do it, and Hong Kong should be well placed to benefit from the prospect and process. REITS that offer reasonably priced assets, shrewd business acumen, skilled management, good governance, strong finance, and the like are expected very well too baring unforeseen circumstances.

Real Estate: How Real Is It?

Real Estate Tech, July 2003

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To many, real estate feels "very solid" = it can be seen, touched, built up or demolished. 3D bricks and mortar in short. Nonetheless, **from an asset investment angle, the abstract, not easily seen, and intangible factors may be more important**. Here are the various levels of real estate tangibility or intangibility:

A) **Fill extremely real, tangible, and solid = bricks and mortar** = as epitomized by (physical) buildings and structures. Generally, they will have floors, four walls, a roof, a structural frame, and a foundation. Thousand years of evolution means such structures have now become relatively more complex with sophisticated building services, automatic systems, and other equipment or accessories. Nonetheless, the basic ingredients still involve stone, clay, mud, sand, water, fuels, and various metals, and still require much maintenance and replacement. You can feel, see, and touch it.

B) **Still feel real but less tangible and solid = real estate market** = with its compliments of market data, information, news, and gossips, which are mostly received / obtained in the form of newspapers, journals, websites, TV news, market reports, and so on. One does not have to be in the market physically, but even if so, one can only observe a small portion of it but not the whole of it. You feel it but cannot touch it, other than the print media or TV screen.

C) **Feel somewhat real but getting more intangible = one's aspirations or values** = nowadays very few real estate advertisements would dwell exceedingly on the technical specifications except mentioning some famous foreign imported refrigerators or appliances being thrown into the deal. Instead, they all appeal to one's aspirations such as "a nice home to start a family" (warmth, affection etc) or emotions such as "reflecting one's social and financial status" (vanity, pride etc). Still feel real but in one's mind only.

D) **Feel less real and getting more abstract = real estate legal title and property rights** = as crystallized by a deed / agreement / legislation, these include right to ingress / egress, use, rent out, and quiet enjoyment etc. While people in places such as Hong Kong take these things for granted, the importance of a proper real estate ownership legal framework is appreciated only when and where it does not exist, or is not up to speed yet. Feel abstract other than a piece of title document.

E) **Feel very abstract = real estate investment analysis =** especially the macro level analysis, which involves researching and analyzing the economic-business, socio-cultural, administrative-political, and population demographics aspects etc, and their interactions and effects on real estate values, if any. Quantitative models, be these simple or sophisticated, are often applied as well, in addition to in-situ observations. Nonetheless, spreadsheets aside, the thought process involves rigorous mental abstraction.

Real estate prices / values reflect 2 things = 1) the overall economic performance and worth of its assets compared to other competing economies; and 2) the advantage or disadvantage compared to other competing properties in the same economy. (1) Is more macro while (2) is more micro, and generally (1) drives (2) e.g. if the overall economy is bad, having the best building materials and design may not help a project price level much. (1) Being macro also involves more abstract factors while (2) being micro involves some more bricks and mortar consideration i.e. abstract factors usually take precedence over the tangible ones when it comes to setting overall asset price levels. This is not to say that tangible factors are not important, it is just that **real estate investors and asset managers would be better off if they have a grasp of the above and know when to engage in (1) and when to apply (2)**.