

BUBBLE BUBBLE TOIL AND TROUBLE



Model Courtesy of Daniël Trottier, Terriland Border Terriers, P.Q.

“Recurrent speculative insanity and the associated financial deprivation and larger devastation are, I am persuaded, inherent in the system. Perhaps it is better that this be recognised and accepted.”

A Short History of Financial Euphoria. John Galbraith, Penguin Books, 1993.

Irrational Exuberance

In 1636 a Dutch sailor added an onion to his lunchtime meal of fine red herring and was promptly jailed by its enraged owner. The “onion” it transpired, was really a common-or-garden tulip bulb then worth about \$52,000 (USD) in today’s money. Tulipomania, the first recorded example of crowd inspired speculation was at its peak. Pity the poor fellow, less than a year later he could, had he wished, have supplemented his bread and water with tulip bulbs costing 95% less. Timing then, as now, is everything.

As with all bubbles, Tulipomania’s genesis was the emergence of a new product (tulip bulbs) which captured the public imagination. In 1554 tulips were brought to Vienna from the Ottoman Empire (Turkey) and thence found a home in Holland. The Low Countries’ soil and climate proved ideal for growing tulips. They were colourful and exotic, but slow to reproduce. Growing from seed took seven to twelve years and the mother bulb only produced two or three clones annually. By 1634 a surge in demand from the French forced up prices and speculators entered the market. Since tulips only flower for a couple of weeks each year a futures market developed at various Stock Exchanges in Holland where contracts to purchase the bulbs were traded. This then was a financial construct, the bulbs themselves did not change hands, only the contracts were traded. Word spread, prices escalated as more purchasers piled into the market: “crowd think” took control. Only the timid refused to participate. During the winter of 1636-37 trading in futures became frantic ... some contracts changed hands ten times a day. Everybody made money ... this was the new economy, wealth without end. Then, in February 1637 the bubble burst, Tulipomania was killed, rather appropriately, by the Black Death. A bulb auction in the Dutch town of Haarlem was

spurned by tulip contract buyers; the community had been gripped by the bubonic plague. Common sense reasserted itself, prices for bulb contracts crashed!

Tulipomania was dead but its ghost marched on; a parade of bubbles striding confidently down the centuries unimpeded by lessons learned, facilitated by memories lost. The seeds were the same: a creative commercial or financial product which promised wealth without effort seized the public interest and fed its greed. Real estate often played a starring role. In 1716 a convivial Scot, John Law, promised to solve the debt problems of Louis XV, a gentleman with extravagant tastes and little intellect, by issuing bank notes backed by gold deposits in Louisiana. The deposits proved lacking, as did Law. In the early 18th century the emergence of the joint stock company with inventions such as a machine gun, which fired round or square bullets depending on the religion of the recipient, excited the public imagination. Then there was the South Sea Company. It was formed to “liberate” the wealth of South America and put it to use in Britain. Our own continent joined the party in 1690 when Sir William Phips and his merry men of Massachusetts failed to capture the fortress of Quebec and rescue its wealth to pay for their adventure. The colonial government made up the shortfall by issuing paper notes. Once that particular genie was out of the bottle it proved impossible to get it back. The North American colonies issued bank notes with abandon, and south of the border they funded a revolution. A bankrupt United States used them to finance the War of 1812 and rashly attempted to annex Canada, hoping no doubt to repatriate some of the latter’s riches.

It is easy to dismiss these bubbles as evidence of an earlier, unsophisticated age: possible even to snicker at the Knickerbocker Trust; today even its name would evoke mirth. However in 1907 the Trust was a pillar of the establishment and when its strategy of cornering the copper market failed, the New York Stock Market went down with it, the Dow Jones Industrial Average losing 48% in 23 months. Human memory is short, about two decades; excess following the First World War, the Roaring Twenties, and rampant speculation fuelled by the conviction that the Stock Market would continue to rise ad infinitum, spawned the Wall Street Crash of 1929. That gave birth to the Great Depression; a decade of misery for many.

Of more recent memory, and closer to home, was the 1997 Bre-X Minerals Ltd. scam, a Canadian company that claimed to have discovered a vast gold deposit at Busang, Indonesia. By the time the company had gone bankrupt, three major Canadian public sector pension plans (Ontario Municipal Employees Retirement Board, Quebec Public Sector Pension Fund, Ontario Teachers Pension Plan) had lost a total of \$215 million.

Real Estate Bubbles

Real estate inspired bubbles found form in the United States’ Savings and Loan crisis in the 1980s; Canada’s encore performance, the Trust Company debacle in the early 1990s; and the worldwide financial meltdown of 2007, as yet escaped by our own country.

Atlantic Canada is particularly prone to real estate bubbles: we have witnessed a steady and unrelenting procession of them during the past four decades. The majority have been created by the provincial governments, often abetted by the Federal government. Some are the result of municipal action. There is an eagerness, urge, compulsion to divert public funds to compete with, or supplant the private sector, driven by the conviction that the latter lacks the “right stuff”. Real estate is ripe for intervention since it provides concrete evidence of “progress”. The mantra “build it and they will come” never grows stale, despite overwhelming evidence of its futility. Few sectors are spared, despite the fact that the damage, as evidenced by misdirected resources, over supply and excess taxes, lingers long after the program has been abandoned: car assembly plants, heavy water facilities, oil refineries, hydroponic greenhouses, hospitality (hotels & motels), industrial properties, call centres, golf courses, steel mills, convention centres, industrial parks, retail parks, fish plants, amusement parks; the list is endless. In a way though, these are side shows. Real estate bubbles initiated by the private sector are so brutal they often provoke country, and sometimes worldwide, recessions.

The late Dr. Galbraith suggested that all bubbles “have involved debt that, in one fashion or another has become dangerously out of scale in relation to the underlying means of payment”. Easy access to capital, and the belief that an opportunity has been created by a new product, or financial instrument, feeds the buying frenzy ... which in turn increases prices and “creates wealth” drawing more buyers into what becomes a self fulfilling prophecy ... until an event occurs which reveals the absurdity of the buyers’ behaviour. Retribution is fast and brutal: prices collapse, buyers go belly up.

Bubble Bio (1990)

“Those who cannot remember the past are condemned to repeat it.”

Jorge Agustín Nicolás Ruiz de Santayana y Borrás aka George Santayana December 16, 1863 to September 26, 1952.

The bubble which burst in the late 1980s had its North American origin in the election of Ronald Reagan to the Presidency of the United States in 1980. That country embarked on a regime of tax cuts and financial deregulation, policies designed to stimulate the economy by unleashing the country's entrepreneurial drive. They succeeded, GDP grew at almost twice the rate of the previous decade. Much of that wealth was invested in real estate, particularly home ownership, following deregulation of the Savings and Loans industry in 1982. Unfortunately due to lax, or non-existent underwriting standards, purchasers assumed debt they were unable to service. It mattered not, so long as prices increased: owners could remortgage their home and service the debt from the increase in capital value. American exuberance spilled over the border into Canada. Here, our Trust Companies embarked on a program of expansion into residential real estate, often purchasing residential real estate brokers to provide a source for their loans. Nor was easy credit confined to the residential sector. The Trust Companies enthusiastically competed with the banks and life companies to place commercial mortgages. The result, in many areas of Atlantic Canada, was a rapid expansion in the supply of commercial space, particularly downtown office space. It was to come on stream just as the bubble burst in 1990. The American bubble collapsed first. The results were truly awful: over 1,000 Savings and Loans Associations failed at a total cost of \$160 billion, \$124.6 billion paid for by the American taxpayer. The tsunami hit Canada in two waves, the first in the late 1980s which virtually wiped out our Trust Companies, some of whom had been in business for 100 years and enjoyed the stature, visibility and reverence then accorded the “big six” banks. Their names live on today only in the marketing programs of those banks who were persuaded to sweep up their ashes. In 1989 the commercial real estate market bubble started to deflate. It burst in May 1990 when the recession started, itself triggered by a real estate bubble that exploded first in Thailand and travelled around the world. Confidence in real estate as an asset class collapsed worldwide. (*Professors Richard Herring and Susan Wachter of the Wharton School, University of Pennsylvania produced an excellent research paper in 1998 on the Asian Twin Financial Crisis*). Panic ensued:

- (1) The banks and other sources refused to provide mortgage financing to facilitate property transactions.
- (2) Owners of investment real estate, such as the pension funds, liquidated their portfolios at knock down prices.
- (3) Limited Partnerships, the forerunners of many of today's REITs were unable to meet the demands of their investors who attempted to “cash out”, and were forced to convert to “closed end” funds.
- (4) The owners of trophy buildings such as Purdy's Wharf in Halifax cut their rents dramatically in order to capture whatever weak demand existed, forcing competing buildings to follow suit.

By 1995 industrial real estate in areas outside the major centres was literally worthless: in some cases it had a negative value. Hotels/Motels throughout the Atlantic Region plunged in value, on average by 50%. Industrial properties lost between 25% to 75% (average 44%) of their value if they were located in the Region's largest park, Dartmouth's Burnside Park, and between 50% and 80% of their value in other metropolitan areas. The office sector in Halifax's Central Business District was devastated, losing about 55% of its value. (In the smaller urban CBDs the impact was much more muted: property owners were local business people and they refused to undercut each other on rental rates). The apartment buildings in areas of high rental demand such as Halifax Peninsula dropped 5% to 10% in value, 30% to 50% elsewhere. Retail, shuddering under the twin impact of the recession and the growth in “big box” merchandising, also suffered badly. (Some municipalities had encouraged the growth of big box retail in the 1980s by providing them with free land). Some shopping centres fell in value by 35% (Neighbourhood) to 55% (Community). Many never recovered and were redeveloped, repositioned or repurposed. It was not a happy time to be a real estate owner ... or consultant ... somewhat akin to the priest who discovers there is no God.

The aftermath was painful. It took 10 to 15 years for property values to recover to their 1989 pre-recession values. Most of that recovery in value results from the fall in interest, and hence capitalisation rates, rather than an increase in net operating income. It is surely the supreme irony, that this fall in interest rates results from an effort to rescue the world from yet another financial crisis in 2007-2008, itself caused by the massive flood of money into real estate (a “Niagara of Capital”) which started in 1997. John Kenneth Galbraith must be turning in his grave.

Bubble Recognition

“Anyone taken as an individual is tolerably sensible and reasonable—as a member of a crowd, he at once becomes a blockhead.”

Johann Christoph Friedrich Von Schiller November 10, 1759 to May 9, 1805.

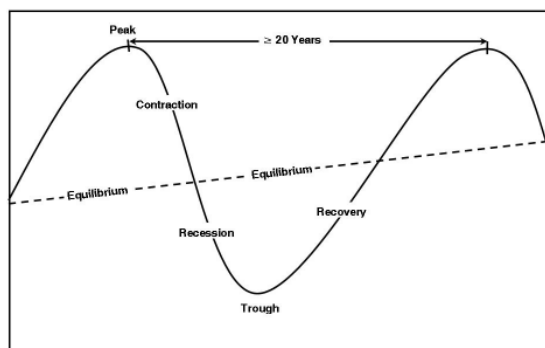
Bubbles are always evident in retrospect: recognising them as they occur is a little more tricky. However they do have the following common characteristics:

- (1) They can be sectorial (effect only one type of real estate), local, regional, national or international in scope. Sectorial bubbles are frequently created by provincial governments enamoured by the touching, albeit misguided, belief that “if we build it they will come”.
- (2) Excess liquidity—easy access to debt for those wishing to enter the market.
- (3) A “new” type of real estate or financial instrument creating the belief that an opportunity exists to amass wealth. Financial innovations are frequently hailed with an enthusiasm best reserved for the Messiah. In reality, every financial “innovation” is a variant on the same theme: the creation of debt secured by real estate. Their recurrent emergence is a tribute to memory myopia: their innovation a salute to opacity, complexity and the ability to relieve the unwashed of their wealth. Financial memory is brief; about two decades.
- (4) Growing and rampant speculation: new entrants into the market contribute to a feeding frenzy buttressed by the belief that since everybody else is getting rich it must be right (“crowd think”).
- (5) The specious association of money and intelligence e.g. “a pension fund of their size would not invest in this if it was not a good deal” ... “a developer of their gravitas would not build unless they were sure there would be a demand for the units”.
- (6) A reluctance to consider end user demand—the belief that end users will materialise once the product is brought to market (aka “build it and they will come” syndrome). Supply expands well ahead of demand.
- (7) Capital values increasing much faster than rental rates or income growth. Servicing the debt load is dependant on subsidising it from the capital value growth i.e. by remortgaging at even higher levels of debt to “liberate” capital value for use in debt servicing.

Real Estate Cycles

Financial amnesia encourages real estate bubbles every twenty years. In the United States the last two bubbles occurred in 1987 and 2007. It is a consistent feature of a bubble’s aftermath that legislators search diligently for the architect, ignore the real cause, jail the more egregious beneficiaries (in Canada such enthusiasm is relegated to apportioning blame) and propose legislation to ban them forever. The Appraisal Institute of America, stung by criticism that its members failed to identify the bubbles and their aftermath, have struggled to find the answer that has so far evaded The Fed. Their solution attempts to address the dichotomy presented by an appraisal completed for financing or purchase purposes. The appraisal measures Market Value at loan origination, or date of purchase: however the recipient expects to utilise it to mitigate their risk over the loan term, or ownership period. That is a problem since property values fall as often as they rise, and do so precipitously when a bubble bursts. So of course do share and bond values, but for some reason wailing, gnashing of teeth and finger pointing ensue when real estate is the culprit. The Appraisal Institute’s solution has merit and in the interest of harmony and dental conservation we are happy to share it with you.

Fundamental Market Cycle



Source: The Appraisal Journal Summer 2013 Page 212: Kerry M. Jorgensen, MAI and Stephen F. Fanning MAI, CRE, AICP and Turner Drake & Partners Ltd. Dec. 2013

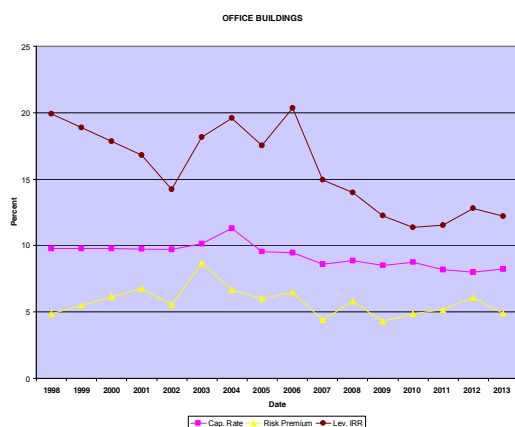
Supply and demand are rarely in equilibrium. A typical market cycle is twenty years or so from peak to peak. However developers and their financiers, fingers badly burnt at the bottom of the cycle, wait until the recovery is well underway before embarking on new projects. Since it takes about two years to bring a major project to market, supply expands rapidly just before the top of the demand cycle and space continues to come on stream as demand contracts. Demand typically contracts faster than it expands so the downward side of the cycle is steeper than the recovery. If the sector has enjoyed a bubble, expansion in supply will have been magnified, and the impact of a contraction in demand will be precipitous. Since property values track the market cycle it is possible to forecast whether they will rise or fall during the mortgage term, or holding period. In order to

determine the property's location on the market cycle it can be analysed from two viewpoints: (1) Capital Markets (the property) and (2) Fundamental Markets (space in the property).

Bubbles are frequently caused by changes in the Capital Markets, particularly the availability and cost of debt, facilitated by the emergence of a "new" financial instrument e.g. mortgage backed securities, or monetary policy e.g. quantitative easing. They stimulate supply as developers take advantage of easy and cheap access to debt to erect buildings the value of which is driven up by increased demand, itself fuelled by the cheaper, easier credit. Capitalisation rates fall, properties increase in value, more purchasers enter the market, more supply is built ... eventually the bubble bursts. Tracking the rise or fall in capitalisation rates, their rate of change over time, their variance with their equilibrium, the quantum of their "risk premium", and their "compression" (differential with other types of real estate) indicates the current stage of the market cycle.

The Fundamental Markets frequently act as the canary in the coal mine signalling the presence of a bubble, and the imminence of a burst, via building utilisation metrics such as the quantum of vacancy and rental rates, and the direction and rate of their increase or decrease, benchmarked against their long term equilibrium.

Measuring Downside Risk



Source: Compuval™ Knowledge Base 2013

Bubbles are caused by purchasers acquiring property for its anticipated capital growth ... price gains driven not by the increase in net operating income, but rather by speculators continuing to drive up values. We have a number of Capital Market tools available to determine if this is occurring. Each month our Investment Committee investigates and analyses every shopping centre, office, hotel and multi-tenant industrial, transaction in Atlantic Canada. The sales are analysed using proprietary software we have developed as part of our Compuval™ Knowledge Base. Six metrics are deployed, three of which are shown in the graph.

Change in the overall Capitalisation Rate (Year 1 Net Operating Income ÷ Sale Price) can signal speculative capital growth. Office property capitalisation rates have been falling since 2004. As investors moved from the stock market into property they bid


up the price of office real estate by accepting lower returns. The price/ft.² of building area has increased by 37%, on average, over that period: 32% is due to the fall in overall capitalisation rates. Our Economic Intelligence Unit surveys 25 million square feet of office space semi-annually for the Federal Government. Net Operating Income has increased by just 13% over that period: slightly less than the inflation rate (15%). The Risk Premium, the portion of the All Cash IRR (Risk Adjusted Yield) in excess of the return on Government of Canada 10 Year Bonds has also declined as purchasers discount risk. The most telling statistic however is the Leveraged Ten Year Internal Rate of

Return which measures the anticipated return over the ten years post purchase. That return has been declining since 2006 despite the fact that the cost of debt is at an all time low and has nowhere to go but up.

When the market correction occurs, as it will, triggered in all probability by rising interest rates, the fall in office property values should be about 25% as measured by the adjustment in overall capitalisation rates to their long term equilibrium. However experience from the 1990 debacle has shown that the rate at which values plunge initially is effected by the liquidity of the debt market and the resolve of long term investors, such as the pension funds and REITS, to keep their head when all around them others are losing theirs. Their track record in this regard is not reassuring. All of the foregoing assumes that the Fundamental Market factors such as net rents and vacancy rates remain stable. There is no reason to assume that such will be the case. Lock in your debt long term or cash out.

Bubble Avoidance

How do you differentiate a bubble from a bull market ... and does it matter? Robert Shiller of Yale University has an enviable record of spotting bubbles. He describes them as “a psycho-economic phenomenon. It’s like a mental illness. It is marked by excessive enthusiasm, participation of the news media and feelings of regret among people who weren’t in the bubble”. Both bubbles and bull markets result in an over supply of real estate usually financed by easy credit. The difference in impact then between a bubble and bull market is really just one of degree ... both in the rise and then subsequent fall in property value. In our view both should be regarded with caution ... tears flow when they end. The fall in property values is the result, in the main, of over supply resulting from over-building, rather than fall in demand. This is key: before you build or buy verify that you are not about to participate in an over supplied market. Fortunately our Economic Intelligence Unit does just that ...

 *Our Economic Intelligence Unit provides Market Surveys, Trade Area Analysis, Site Selection, and Supply and Demand Analysis on Office, Industrial, Retail, Apartment and Sub-division property. Consult our web site www.turnerdrake.com for more details ... or call Alex Baird Allen at 1-800-567-3033 Ext. 323.*