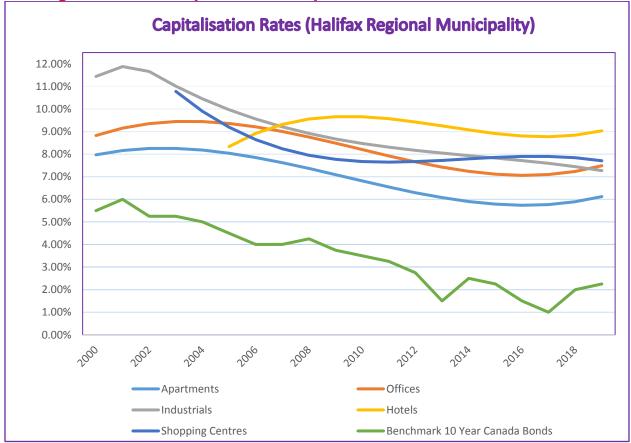
All Together Now: Cap. Rates Compress!



Source: TDP Cap. Rate Report, June 2019 (Updated) and Bank of Canada.

Capitalisation Rates are the most widely used benchmark of property investment performance. They are easy to understand, can be deployed across all property types, and are the reciprocal of the Price/Earnings Ratio utilized to evaluate stocks. Capitalisation Rates measure risk; they reflect the possibility that actual future income, expenses and property value may differ from those anticipated by the investor on the date of purchase. The more uncertain these variables, the greater the risk inherent in the purchase decision and the greater the rate of return required to persuade purchasers to commit to the investment. The Capitalisation Rate is the ratio of the anticipated first year's net operating income (post purchase), to the purchase price, expressed as a percentage i.e.

Capitalisation Rate = (1 Net Operating Income \div Purchase Price) \times 100

¹The Net Operating Income is the income remaining after all operating expenditures (other than mortgage debt service and depreciation) have been deducted from the effective gross income. It is the equivalent of EBITDA (earnings before interest, taxes, depreciation, and amortisation).

Although Capitalisation Rates measure risk they also reflect the strength and weakness of supply and demand. Since different Property Types and Property Classes often appeal to different groups of purchasers, Capitalisation Rates do not exist on a continuum but reflect the competition for property within each buyer group. Hotels for example, do not compete for investment dollars with low rise apartment buildings because each predominantly appeals to a different buyer group. Property Classes within specific Property Types may not compete for the same group of purchasers; high rise apartment buildings usually find a market with national or international purchasers, low rise apartments appeal predominantly to local or regional players. Both groups may have different appetites for risk, investment opportunities, competition for product, time horizons, tax considerations, access to capital, management capability, local knowledge and operating efficiencies.



As can be seen from the Capitalisation Rates Graph, Cap. Rates have declined for most property types over the past twenty years and have been the main, often the only, reason why property values have increased over that time period. Apartment properties, for example, struggled for years to match their rental increases with the inflation rate as the latter drove increases in operating expenses and eroded the residual net operating income. The tide turned in Halifax Regional Municipality in 2016 due to increased demand for rental accommodation from the wave of retiring Baby Boomers and increased immigration. (HRM is the only area in Atlantic Canada large enough to generate a sufficient quantity of data to afford reliable analysis across the various property types but we do analyse data from all of the major urban areas, where it is available. There is a fairly consistent pattern so our conclusions can be broadly extrapolated pari passu with the local economic environment). At present there is a feeding frenzy for most types of commercial real estate as investors from outside the Region join those already here to purchase existing real estate or create new development opportunities. Many are "new" investors attracted by the dizzying rise in the value of some types of real estate such as apartments and the "stability" represented by a physical asset. This, together prices increasing faster than rents, rates of return decreasing below long term trends, shorter marketing times and many other elements of market activity are classic symptoms of a real estate bubble. Is the party about to end? Probably not just yet, but it is worthwhile pausing to consider what is happening and why. Consider too that low inflation carries its own risk if you are a real estate investor... it may constrain mortgage rates, but since rents do not rise quickly it takes longer to build equity.

Where We Are Now

Capitalisation Rates haven't just fallen, they have also compressed. In year 2000, the overall Capitalisation Rates for Apartments was 7.97% and Industrials 11.44%, a differential of 3.47%. By 2019, the overall Capitalisation Rates were Apartments 6.12% and Industrials 7.27%; the spread had narrowed to 1.15%. Conventional wisdom holds to the view that the fall in Capitalisation Rates is simply a function of falling interest rates generally... and that this is exemplified by the declining return on 10 Year Canada Government Bonds (the green line in the Capitalisation Rates Graph and the generally accepted surrogate for a "Risk Free" rate). There is indeed a high degree of correlation between Capitalisation Rates for Apartments, Offices and Industrial properties and the long term Canada Bond Rate; it "explains" most of the "year over year" differential (Apartments – 90%, Offices – 85%, Industrials – 87%). With Retail (Shopping Centres on the Graph), only 51% of the "year over year" difference in Capitalisation Rates is accounted for by the Canada Bond Rate: no mystery here, on-line shopping is taking its toll and this is fighting against decreases in the Capitalisation Rate because risk is increasing. With Hotels though, there is virtually no correlation between the Capitalisation Rate and Bond Rate. But this sector aside, the 10 Year Government of Canada Bond Rate does a good job of explaining why Capitalisation Rates are falling. If the analysis is restricted to the past ten years the impact of the falling Canada Bond Rate is less pronounced but broader in its impact, explaining 70% of the yearly Capitalisation Rate differential for Apartments and Offices, 68% for Hotels and 43% for Industrials. Capitalisation Rates for Retail are negatively correlated with the Canada Bond Rate as investors increasingly demand a higher Risk Premium to compensate for the adverse impact of on-line shopping. We can therefore project, with some accuracy, the trajectory of property values. Provided that rents and vacancy remain stable, the value of Apartments, Offices, Industrials, and to some degree Hotels, will rise if the long term Bond Rate falls, and decrease if it rises. The positive impact on Retail values of a falling Bond Rate may be offset by changing shopping habits in favour of on-line purchases. Easy peasy? Well not quite!

If the Canada Bond Rate had been the only driver, Capitalisation Rates for all property types would have fallen in parallel with each other, but such was not the case, they have also *compressed* i.e. move closer to one another. The common explanation is that this compression was due to investors changing their risk profile and becoming less risk adverse with certain types of property. We tested this assumption by comparing the "Risk Premium" for each property type with the Canada Bond Rate. (The "Risk Premium" is the "reward" investors require to persuade them to invest in each specific property type and is the difference between the Capitalisation Rate and the Canada Bond Rate... the latter representing the "Risk Free" rate, i.e. Risk Premium = Capitalisation Rate – Canada Bond Rate). Over the time periods tracked by our Graph we confirmed that investor's risk profiles had indeed changed. Offices now demand a significantly higher Risk Premium than was the case twenty years' ago, a reflection of the damaging impact of oversupply, particularly in Halifax's Central Business District, itself driven by a false narrative, propagated by a provincial agency, that the world's financial sector was decamped offshore anxiously awaiting completion of office space fit for their occupancy. Hotels too warranted a higher risk premium as did Apartments, albeit to a lesser degree. Industrials are viewed as somewhat slightly less risky than was the case twenty years ago. Retail is a special case:



despite the growth of on-line shopping facilitated by the start of the World Wide Web in 1991, and propelled by Amazon and eBay in 1995, the potential impact was not recognised by investors in Retail real estate in HRM until 2009, after which they demanded an ever higher risk premium. It is a commonly held belief, and one that we shared until we completed this analysis, that the reduction in Capitilisation Rates was due, in part, to investors discounting risk and becoming less risk adverse. Our analysis reveals that the reverse is the case. We regressed the Risk Premium against the Canada Bond Rate and discovered there was an inverse correlation with every property type.... as the Canada Bond Rate declined the Risk Premium increased. Presumably investors are wary that the low interest rates will not last forever and have increased their Risk Premium to give themselves a cushion to hedge against future interest rate increases. Industrials were the only property type where this was not statistically significant. The percentage change in the Risk Premium "explained" by the change in the Bond Rate is very strong for Hotels (88%), Offices (77%) and Apartments (76%); it is less so for Retail (51%) and insignificant for Industrials (3%). If the analysis was restricted to the last ten years the strength of the correlation was even stronger: the differential in the yearly Bond Rate explained 78% to 99% of the difference in the Risk Premium and was statistically significant for all property types. There is therefore some tolerance for an increase in mortgage rates in the future without triggering a market meltdown.

Where We Were: A Historical Perspective

"Those who cannot remember the past are condemned to repeat it." George Santayana.

1980-2000

The past five decades have been tumultuous years for investment real estate in Atlantic Canada, and North America in general. To a large degree the region has been buffeted by winds that originated elsewhere. From a historical perspective income producing real estate matured into an alternative investment vehicle to the stock market in the United Kingdom in the 1960s. Continental Europe came of age during the 1980s. The trend gained traction in North America during the late 1970s and early 1980s. The Atlantic Region emerged as an investment market during the mid-1980s: the vociferous appetite for real estate had consumed prime opportunities in the larger centres in Canada and the United States, forcing investors to consider secondary markets such as this Region. The impetus for real estate investment gained strength following the election of Ronald Regan to the Presidency of the United States in 1980, and his program of tax cuts and financial deregulation; policies designed to stimulate the economy by unleashing the country's entrepreneurial drive. American Gross Domestic Product grew by 72% during that decade. Much of that money was invested in real estate, particularly home ownership, following deregulation of the Savings and Loan Industry in 1982. American exuberance during the 1980's spilled over the border into Canada. Here, our Trust Companies embarked on a program of expansion into residential real estate, and also into commercial mortgages where they enthusiastically competed with the banks and life companies. Atlantic Canada was a beneficiary and in the mid-1980s, developers embarked on an orgy of real estate expansion, enthusiastically building shopping centres, office buildings (located mainly in the Central Business Districts), hotels (often encouraged by government grants), industrials (subsidised by government grants if they were located outside the major population centres) and apartments (encouraged by high ratio mortgages guaranteed by CMHC). In large part this building activity was fuelled by easy access to credit, rather than demonstrated demand.

Unfortunately in America, lax or non-existent underwriting standards, incompetence and fraud became commonplace, and more than 1,000 Savings and Loans Associations subsequently failed in what Canadian economist John Kenneth Galbraith called "the largest and costliest venture in public misfeasance, malfeasance and larceny of all time". Between 1986 and 1989, first the United States' residential property market collapsed, and then credit dried up for commercial lending. By the late 1980s our own Trust Companies had started to fail, falling like nine pins. By 1989 the commercial property market in Atlantic Canada started to feel the pinch as credit dried up. This was by now a worldwide phenomenon whose triggering event lay far offshore in Thailand. The baht, that country's currency, had collapsed as a result of over exuberant property lending by its banks: the contagion spread to Japan, whose banks had exhibited similar malaise, and then around the world. We pinpoint May 1990, as the start of the concomitant recession in Atlantic Canada, based on the reduction in residential sales volume and prices, an activity we have tracked continuously since 1978. Unfortunately this coincided with the bringing on stream of much of the commercial space developed in the 1980s. By 1992, vendors forced by financial pressure to sell, faced an awful fact, an average 50% of their nest egg had evaporated; its value eviscerated by a banking system paying penance to past excess by refusing to lend at all. It was not a happy time for investment real estate, made worse because (1) the banks and other sources



refused to provide mortgage financing to facilitate property transactions, (2) owners of investment real estate, primarily the pension plans, panicked and started to liquidate their portfolios, (3) the owners of trophy properties, such as Purdy's Wharf in Halifax, cut their rents dramatically in order to capture whatever weak demand existed, thus triggering a similar reaction from properties on the rungs below them, (4) oversupply of space in some markets was exacerbated by new supply coming on stream which had been started before the recession. Commercial real estate assumed all of the appeal of the Black Plague. The property markets effectively seized up and liquidity was slow to return. Sales activity, other than foreclosure sales, really did not start again until 1995 led by hotels/motels, then apartments (1997), industrials (1997/1998), offices (1998) and retail (1999). The recovery in prices took much longer. It took 19 years for some properties to recapture the nominal value they lost in 1990; and most of the recovery has occurred post 2000.

2001 to 2010

The reason the recovery in nominal capital values in most communities in Atlantic Canada was so prolonged, was not lack of occupier demand but rather restricted access to credit. Property too held little appeal as a wealth creating vehicle because the stock market was on a tear. From 1992 to 2000 the latter experienced a period of rapid expansion, fuelled in part by the growth in technology stocks. This "dot com" boom came to an end in 2000; between 1st September 2000 and 2nd January 2001 the technology heavy NASDAQ dropped by 46% in value, and by October 2002 it had declined by 76% from its previous high. The WorldCom and Enron frauds, which surfaced in 2001 and 2002, were the final curtain. Suddenly real estate was an attractive investment vehicle again ... and credit was again available. During the mid to late 1990s the creation of new types of financing such as the conduits, which agglomerated mortgages and then resold shares in them to many different purchasers, and the metamorphosis of Limited Partnerships into Real Estate Investment Trusts (REITs), followed very gingerly by the banks, had gradually led the commercial property markets out of the wilderness. Real estate slowly regained its mantle of respectability, burnished in part by the shenanigans of the stock markets. After the turn of the century, pension funds et al rushed into property investment with the same happy abandon they last exhibited when they exited the field a decade earlier. Overall Capitalisation Rates, the rate of return investors are willing to accept during their first year of ownership on their purchase price, started to decline as financing became less expensive, and compress as investors realigned the risk profiles for the various property types.

In 2002, for example, real estate investors in Halifax Regional Municipality, the Region's largest metropolitan area, required yields of 8.25% (apartments) and 11.66% (industrials). By 2007 investors' yield expectations had declined to 7.62% (apartments) and 9.21% (industrials) and their yield premium for industrials over apartments had compressed from 3.41% (2002) to 1.59% (2007). Average Overall Capitalisation Rates in Atlantic Canada declined from 10.42% in 2000 to 8.51% in 2008. This was given impetus by intense competition for product by the region's local and regional investors (such as Southwest Properties, Universal Properties, Overland Realty, Banc Properties, Capital Investments Moncton), the REITS (CREIT, Whiterock, Crombie, Riocan, Capreit, Transglobe, Walmart First Pro, Homburg, etc.) pension funds (OPP, HOOPP, Sun Life, GWL, et al) and others (Killam, Ashford, GE Canada, Greenarm, etc.), as all fought to acquire investment grade property. Then it all went wrong.

By the end of 2007, the wheels had started to fall off the financial sector. Those conduit deals proved on closer inspection to benefit the brokers rather than those holding the paper, and the property owners. The inflexibility inherent in a mortgage that had been repackaged with other loans, sub-divided and resold to many different lenders, reared its ugly head. Once the genie was out of the bottle it was difficult get it back again if (when) the mortgagor wanted to finance mid' term. By the end of September 2007, the crisis over asset backed commercial paper (ABCP) hit the windshield with the formation in Canada of a committee headed by Mr. Purdy Crawford, to attempt to unfreeze finance backed by it. Meanwhile it emerged that the financial community in the United States, in a moment of mental aberration, had forgotten all about its Savings and Loan crisis in the 1980s and had happily loaned billions of dollars to home owners who lacked the fiscal ability to pay them back. Nor was this fiscal irresponsibility confined to North America. In September 2007, a small British bank that had borrowed short in order to lend long, fell victim to the freeze in the credit markets, experienced a run on its deposits, lost 73% of its value and one of its managers (angry customers locked her in her office after she refused to let them withdraw £1 million from their accounts), and had to the nationalised. During 2008 the stock market continued to crash, US bank Lehman Brothers went bankrupt, and governments around the world rushed to shore up their banks with loans, guarantees and/or outright nationalisation. Canada was the exception that proved the rule, but commercial property prices in Atlantic Canada fell as investors factored in the additional risk. The last two years of the decade saw retrenchment by some investors such as ING Real



Estate, who in 2010 sold the industrial portfolio they had acquired in 2006, at a loss. Some REITs were still active purchasers, as were sectorial buyers such as Killam (apartments), and pension plans. Some regional investors (Southwest Properties, Geosam) had turned their attention south of the border and were snapping up distressed developments in Florida. The pot, whilst still warm, had gone off the boil.

2011 to 2019

After 2010 there was still investor interest for good quality real estate in Atlantic Canada but purchasers were taking a more measured approach. The opportunities in the United States and Europe had diverted attention to opportunities elsewhere. The region's demographics posed a challenge. The region had the oldest population in the country, a situation exacerbated by the baby boomers who started to turn 65 years of age in 2012 and will continue to do so through 2031. The decline in working age population thus caused, was not offset by immigration. As the result the population was aging rapidly and the pool of working age producers, shrinking. This was reducing space demand. By the mid-point of the decade, the tracking tool in our CompuVal® Knowledge Base signalled increasing investor unease as evidenced by an average 38 basis point rise in the Overall Capitalisation Rate (Year 1), a static All Cash Internal Rate of Return, and a 96 basis point rise in the Risk Premium. However the tide then started to turn, fuelled in part by continued low interest rates, anemic returns for alternate investments in the stock and bond markets, and a lack of real estate investment opportunities elsewhere in Canada. Towards the end of the decade an aging population coupled with aggressive immigration initiatives, particularly in Nova Scotia and Prince Edward Island, resulted in rapidly increasing demand for rental housing and elder care. The latter was constrained to a degree by provincial government budgetary concerns, but apartment rental demand fuelled a major investment in new and existing multi-family real estate which continued to drive down capitalisation rates. Investor demand for office space was muted in areas such as Halifax's Central Business District by vacancy rates edging towards 20%. A similar situation persisted in the Saint John, New Brunswick, Uptown (Central Business District) where weakening demand for office space during the latter half of the decade had resulted in a vacancy rate of 21% by 2019. Meanwhile strong investor demand during the mid-point of the decade for office space in St. John's, Newfoundland's CBD was vanguished by the adverse impact of falling oil prices on offshore development: office vacancy soared from 4% to an eye watering 28% by 2019. There was continued investor demand for industrial property throughout the Atlantic Region. Hotels, new and existing, also proved to be a major investment vehicle during the latter part of the decade. Retail properties were a study in contrasts as on-line shopping continued to take its toll. In general, Power Centres and a few major Regional Shopping Centres, expanded whilst the remainder declined. Retail facilities which serviced a local hinterland by providing services and convenience goods were able to hold their own and attracted investor interest; as did free standing units with a good tenant covenant which were leased on a "net absolute to landlord" basis.

Where We Are Going

The value of an investment property is the product of its Net Operating Income (NOI) and its Capitalisation Rate (Cap. Rate). Short term fluctuations in supply and demand aside, *these two factors will govern any increase or decline in value*. If the NOI increases and/or the Cap. Rate declines, the value increases... and vice versa. In the long term, NOI is correlated with the inflation rate; the Cap. Rate with the 10 Year Canada Bond Rate.

Inflation in Canada has averaged 1.93% (Median 2.02%, Range 0.3% to 2.74%) over the past 20 years. Has the dragon of inflation finally been slain? The Economist considered this very question in its October 12th 2019 issue. In an article titled "The End of Inflation?" it observed that "The rich world conquered runaway prices by the late 1990s as governments made central banks independent and gave them inflation targets. In the 2000s and the early 2010s commodity price booms kept prices rising at a decent clip. But since oil prices crashed in 2014, inflation above 2% has been rare". The Economist gave three underlying global drivers of low inflation (1) the low price of commodities, albeit recently threatened by increased demand in emerging markets such as China, (2) the low price of manufactured goods as production shifted to low wage countries and access was facilitated by the Internet, and the growth of firms such as Amazon and Ebay, (3) cross border capital flows which took advantage of the glut in global savings, itself the result of ageing populations, slower productivity growth, a scarcity of safe investments and a dearth of lucrative investment opportunities. Within developed economies the Internet promoted the efficient distribution not just of goods, but also services (many of which are now provided at little or no cost). In the past, falling unemployment rates had triggered wage increases but this has not happened: the Canadian unemployment rate is currently 5.9% (November 2019), the United States' rate just 3.5%, without noticeable increases in wages. The Economist postulates that the



Phillips Curve, which holds that inflation escalates as unemployment falls, may still exist but is now non-linear.... prices and wages could suddenly and quickly accelerate should unemployment fall beneath some threshold. Unless this occurs, or American President Trump's trade wars with the world trigger price increases, a war in the Middle East disrupts oil supplies, or cross border capital flows cease, inflation appears likely to hover around the 2% mark. In the long term therefore property NOI increases are likely to mirror the inflation rate and offer little prospect of value growth. There will be short term fluctuations in NOIs due to the imbalance between space supply and demand. In Halifax Regional Municipality the oversupply of office space will continue to depress NOIs and, in the face of static or decreasing demand, this can only be addressed by taking office space out of service through its demolition or conversion to more productive use such as apartments. This is already occurring in the Halifax CBD but is likely to be a protracted process lasting another decade or more. In St. John's, Newfoundland, the future of the office sector is dependent on the revival of the offshore energy sector. Apartment rents throughout Atlantic Canada are now in growth mode after several decades during which increases struggled to match the inflation rate. Rental growth ignited in HRM in 2017 and has since escalated as demand took off. Increased demand is now evident in the major urban areas throughout the Region driven by (1) the Baby Boomers as they transition from home ownership to rental accommodation, (2) rural to urban migration, (3) increased immigration. Demand for apartment rental accommodation is likely to peak between 2026 and 2031: you can view the results of our research for HRM, Saint John, Moncton and St. John's on our web site at www.turnerdrake.com/newsresearch/documents/BANKINGONTHEBOOMERS.pdf.

The Ten Year Canada Bond Rate is the product of the Bank of Canada's monetary policy, acting to control the inflation rate and keep it within a fairly narrow band. The Canada Bond Rate was 1.64% in December 2019 versus 1.80% for its United States' equivalent, 0.9% for the United Kingdom and -.03% for the Euro Zone. Over the past ten years it has averaged 2.25% (Median 2.2%) and ranged between 1% and 3.5%, trending downwards, albeit erratically. *On average, every 1% decrease in the Canada Bond Rate results in a decrease in the Cap. Rate (Apartments – 0.38%, Offices – 0.32%, Industrials – 0.38%, Hotels – 0.34%)* but no significant alteration in the Retail Cap. Rate (this could be a limitation of the data or more probably the impact of on-line shopping). In the absence of inflation, the Cap. Rate, as influenced by the Ten Year Canada Bond Rate, will be the main driver of property values in the long term though there will be short term fluctuations in values due to imbalances in supply and demand. If Canada Bond Rates continue to fall, property values will increase... and vice versa. This assumes that there will be sufficient liquidity to finance property purchases. If Canada Bond Rates and mortgage rates increase, expect a time lag before property values fall. Property owners have factored about 0.5% into their Risk Premium over the past ten years to hedge against rates rising.

