

Outlook for the Canadian Multifamily Industry Post COVID-19

I have been asked many times over the last month or so how COVID-19 impacts my view on the apartment space in Canada. I have given a number of talks in which some have been surprised by my level of optimism. I explain my reasoning in this article.

HOW CAN I BE OPTIMISTIC AT A TIME LIKE NOW?

It is in my nature to be optimistic. It is hard to be an entrepreneur and not be one. Who would take the risk of starting a business–risking time, capital, personal reputation, and security for the unknowns of entrepreneurialism?

Most entrepreneurs I know are optimists to their core. I am also an optimist for two other reasons. For one, I believe that the continued cost of an economic shutdown to our way of life, relative to the risk of COVID-19, means that the economy must reopen and soon. Two, I believe that apartments are going to be one of the most resilient businesses in an uncertain world and that this will open many opportunities for Centurion. I will expand on both of these ideas below.

The Continuing Economic Toll of the Shutdown

In the year ahead, we will know whether the shutdown was justified. Countries like Sweden have not shut down and they have managed to "flatten the curve" like we have. So, will it have been worth destroying the economy to avoid COVID-19? While every death is a tragedy, no matter the cause, each life saved in the battle against COVID-19 comes at a cost too, not just in dollars and cents, but in other avoidable deaths (like suicides, alcohol or drug abuse, spousal or child abuse, and foregone medical tests and procedures).

What about the people who lost their jobs, businesses, homes, families that split apart? Already, many businesses that have closed, will not reopen. Months more of this, and many more will be closed permanently and the jobs and tax revenues they provided, gone as well.

As a businessperson, I can tell you that my business is more than just a source of income, it is a large part of my identity and huge source of happiness and personal fulfilment. Even before starting my own business, I loved the personal satisfaction I got through work. So, shutting down businesses and the economy is more than about money and the means of feeding our families for both business owners and employees alike.

We are already seeing the early stages of a push back, particularly in the U.S., from people demanding the right to return to work so they can feed their families, pay their mortgages, go to the park, and live their lives. Sounds pretty gloomy right? It is, but it is because our collective prosperity, mental and physical health depends on going back to work, that we will. It is because we can see that we cannot stay home forever, that we will end sheltering at home, sooner than later.

Our way of life may look different than a few months ago with continued social distancing, washing our hands, wearing masks in public, empty sports stadiums with games played for a TV only audience, and maybe bars closed for a while, but things will go back to a new normal. There is no choice, so it will be done, and that means that things will be okay for the economy in general. It will take years to



get back to trendline growth for the economy, and some things will be changed for a very long time (e.g., who is booking a cruise anytime soon?), but that does not mean we will not get used to the new normal, whatever that is.

Apartments Are One of the Most Resilient Businesses

Apartments are a core needs business. Everyone needs to live somewhere. In this crisis, people have focused on four things, and largely in this order: (1) having food to eat; (2) having a roof over their heads; (3) their health; and (4) returning to work. If you listen to the media, you would think all that mattered was health and toilet paper. This is why I chose this list order.

If you do not have food to eat, well pretty much anything else does not matter. You will starve. Next you need housing. Yes, you could live on the street or bunk in with friends and family in the very short term, but can everyone do this? Of course not. Without housing, at society level scale, you are at serious risk of death in a winter country let alone from a virus. That is why health is third. We are fortunate that to date, very few Canadians have gotten seriously sick or died from COVID-19, relative to how many would have if they did not have either food or shelter.

Lastly, getting the economy back on track matters in the long term, because in the end, that is how we function as a society. Without an economy in the long term, there is no revenue to pay for food, housing, health or anything else. In the short run, because of government and social supports, the economy will not collapse, and will have the chance to recover in the long term. I am not suggesting for a moment that any one of the lives or jobs lost are not a tragedy. Every one of them is. This is just my long-winded way of saying that apartments are second only to food in being "core need" for all of us, and that is why apartments will be one of the most resilient businesses in this or any crisis.

We have seen this in our own portfolio. Even though courts have closed, and some provinces have banned evictions while we are in lockdown, rental collection rates are largely in line, and only slightly behind benchmarks. The CERB and other government supports has, in my opinion, helped greatly. Given the national shortage of housing, and that market rents are generally higher than in place rents, we have seen very few that have not paid their rent or that have tried to take advantage of the situation, effectively playing games with their housing security.

OUTLOOK FOR APARTMENTS

I have spent much time thinking through the impact on the apartment industry of COVID-19 over various investment horizons. I have also thought about how COVID-19 has impacted my investment thesis.

Prior to COVID-19, I had stated numerous times that I believe there were five primary tailwinds that would keep rental demand high with low vacancies and strong rental growth and drive the construction of more apartments in the next decade than we have seen in the last two generations. We launched our development strategy over seven years ago, to capitalize on those tailwinds by building a pipeline of apartment investment opportunities for the wave we saw coming. We have been proven right, but we are still in the early stages of this apartment building boom. Much opportunity lies ahead.

I discuss those five tailwinds below, and add four more that have become clear to me recently:

- 1) Strong Immigration
- 2) Housing Affordability, limiting the ability to buy or qualify for loans to buy property



- 3) Millennial Preferences
- 4) Aging Society
- 5) Construction Constraints on new housing
- 6) New Desire to age in place and avoid seniors' homes
- 7) New Deleveraging/De risking and changing home ownership and investor intentions
- 8) New Elimination of Airbnb as a force in our major cities will result in lower, long-term construction of condominiums, which have fed the shadow rental supply
- 9) New -Preference for multifamily apartment investments over other asset classes will increase
- **(1) Strong Immigration has driven the demand for housing, both ownership and rental.** Most new immigrants rent until they determine where they want to live, establish jobs and income, which qualify them for the credit to buy a home. While immigration in the short term will be disrupted by travel restrictions, in the not too distant future, it will resume.

With Trump being largely anti-immigration, and having recently put a short-term ban on further immigration, plus with the generous support that the Canadian government put in place for the citizens, the low death rates from COVID-19 and strong faith in the quality of the Canadian health care system, it is not too hard to envision that even more people will want to come to Canada. With annual immigration targets of 350,000 or more for the foreseeable future, there will be a lot of people that will need housing.

- **(2)** Housing Affordability in many markets in Canada has been severely stretched, mainly in Montreal-Toronto-Vancouver (MTV) and surrounding areas. Not only have prices become unaffordable, but due to the "stress test" and other macroprudential regulations, many more people cannot qualify to buy and thus, need to continue renting. This is no doubt one of the things which drove rental rates much higher in the MTV as vacancy rates declined. While single-family house prices may come under pressure, this may not be enough to restore affordability or the ability to qualify to purchase. Thus, I believe that the rental demand from this tailwind, will not decline, at least not materially.
- **(3)** Millennial Preferences speak to the differences between one of the core client demographics of apartment demand (the other being seniors). As a generalization, millennials tend to be more willing to pursue experiences than assets (i.e., "rent" versus "own"); want to live in urban cores near friends and social activities; have fewer cars (so transport nodes matter); have fewer, if any, children; and have fewer dreams of the white picket fence in the suburbs. This is not to say they are all like this; but these core preferential differences to prior generations is a driver of rental demand over single-family housing demand. COVID-19 probably does not change any of those desires.
- **(4) An Aging Society is often talked about as a key driver of changes in society.** Seniors are one of the core demographics of apartments. Many people sell their homes and rent once the kids leave school. The aging of our society is not changing so this demand driver remains intact.
- **(5) Construction Constraints on new housing are a real and continuing problem.** The constraints are caused by:
 - a) Planning delays, requirements, and costs. It can take years to get a project approved in most of the cities in Canada. If you are building a concrete high-rise, it could take three years to get approvals to get out of the ground, three years to build, and another year to lease it up making



the development cycle seven years. That is a very long time. Capital costs money and time introduces even more risk. The longer it is invested, the higher the absolute and relative return required to justify the risk. Some municipalities have also introduced social or low-cost housing requirements into the planning requirements. The problem is that these requirements often make projects unworkable. Politicians get to grandstand that they are "standing up to rich developers" to build social or low-cost housing, but it just won't work, and nothing will get built. The red tape involved in getting approvals is fixable, but government bureaucracies are not known for this, so it is unlikely that significant changes will come.

- b) NIMBYism causes many projects to be delayed significantly, be modified, or killed altogether. While everyone agrees that we have a housing supply and cost crisis, and that we need to build more housing, no one seems to want it near them. Politicians rarely have the courage to push through what is right for society at the cost of their votes.
- c) Fees and taxes can be up to a third of the cost of the construction of a new building (development charges, GST/PST, land transfer taxes). Cities are reliant on these charges for their revenues and hate giving them up. Cities talk about building new rental stock, but ask them to reduce development charges or do property tax waivers or phase-ins to help the numbers work and they balk (some cities do it, but not many).
- d) Cost of land use competition is a major constraint on apartment construction. In major urban cores, an apartment developer is competing against a condo developer for land. It is rare that the apartment developer can beat the condominium developer on price. In suburban markets, this is less of a problem, and one of the reasons why most of Centurion's new rental development activity is outside the areas where one has to compete heavily with condo developers for land.
- e) Labour availability, given the amount of construction going on in the country to meet the need for housing, will continue to be a constraint.

These constraints will mean that the pace of new housing construction will likely not be able to meet demand for either the ownership or the rental markets for the foreseeable future. That said, COVID-19 market uncertainties, which slows condominium sales, will shift more momentum to apartments as developers shift their condominium plans to apartments, to unlock their land banks.

(6) An Increased Desire to Age in Place will arise from COVID-19. There was already much discussion over the past year or so that the anticipated demand for seniors housing has not been as strong as what was so broadly forecasted just a few years ago. While it is true that the forecasts about our society aging were in fact correct, the assumption that people would move into dedicated seniors' facilities has not happened as expected. Technology, and a largely healthier population, has enabled more people than ever to stay in their homes.

Given that a majority of COVID-19 deaths so far seem to be in seniors' facilities, I believe the prospects for the seniors housing/long-term care business are not optimistic. For everything we did on this lockdown, for all the sacrifices made, the greatest failure has been the inability to protect the most vulnerable segment of our population, where it should have been most obvious that we had a potential problem.

As such, it is my thesis that these facilities will now be seen as an absolute last resort, for those without options, meaning that some renters will chose to stay in their regular apartments rather than



moving into facilities, keeping demand for apartments in one of our key demographics stronger than it may otherwise have been.

(7) Deleveraging & De risking on the part of house and condo owners will increase rental demand. The economic shock of COVID-19 and the lockdown that resulted will change, for a long time, the willingness and ability of homeowners to leverage up or to qualify to buy homes and condos. I have surveyed (informally of course) a number of banks and been told that something on the order of 12% of homeowners called their banks to ask about mortgage deferrals. Only about 0.5% of residential tenants, not only in our portfolio, but also in surveys of other apartment owners, asked in advance about deferrals.

That means something in the order of 25 times the number of homeowners were worried about their upcoming payment than were tenants, and even if anywhere close to that multiple, has profound implications. No matter what, losing the roof over your head at any time is a traumatic event, whether you are an owner or a tenant. However, there is a tremendous difference. A tenants exposure is to their lease payment and given that most tenants are on month to month, their financial exposure is relatively limited if they were to lose their homes and had to move in, on a temporary basis with friends or family.

Losing the house you own is another matter entirely. If you cannot carry your mortgage or refinance it, for many whose entire net worth is tied up in their homes and that may represent an entire lifetime of saving, and personal time investment, it is potentially a catastrophic and unrecoverable loss. After the Great Financial Crisis in the U.S., which did not hit Canadians nearly as hard, many people lost their homes and either became so traumatized as to want to avoid the risk of leverage and home ownership or could not qualify to buy again, that the home ownership intentions of society changed materially.

Rental vacancy rates declined and rents exploded higher as prior homeowners went into rentals. We do not know how many Canadians will re-evaluate their willingness to take on excess debt or have all their equity tied up in their homes, but there will be many, and they will contribute to increased long-term demand for built rental apartments over time.

(8) Elimination of Airbnb As a Force in major cities will have both short- and long-term impacts on the rental market. Numerous cities like Toronto have now banned Airbnb. Some of the Airbnb property owners will sell their units or rent them in competition to apartments. Over the past few years, many condos came off the long-term rental market and went to service the travel markets. If the location was right, the profits were rich as units could be rented at two to four times the monthly income as could be achieved in the long-term market.

This did reduce short-term supply of rental options which got pushed to apartments. This, and serious lobbying by the hotel industry, never happy with the competition of choice that Airbnb brought to the market, helped contribute to the banning of Airbnb. This will affect urban core and entertainment districts of the larger cities more than other parts of their cities, which would not see much Airbnb type demand. However, it is the excess profits provided by Airbnb type operations that has, in part, provided demand for condo construction in these markets.

It is often never mentioned that the vast majority of new condominium sales in urban markets almost entirely go to investors and not homeowners. Don't believe me? Think about this. New condominium sites in dense urban cores requiring concrete towers to work economically need 75-80% presales in order to get bank financing to build. These presales may be 3-4 years away from delivery, maybe longer. Which would be homeowner, who needs housing now, would be willing to wait 3-4 years to



take delivery of their home? Would a new couple, a newly single person or new parents be willing wait that long? No, they would not. They go and buy something that suits their needs NOW and is available in the immediate future.

Thus, virtually all the condominium sales in urban cores, go to investors (intending to hold for the longer term) or speculators (those intending to flip the asset either before or shortly after closing). This is ok. Without these types of buyers, many fewer condominiums would get built, which would reduce the long-term supply of shadow market rentals (i.e., condominiums) in these areas.

Combine reduced income potential from the loss of rich Airbnb profits with a reduced willingness to be heavily leveraged, and in the long term, there will be fewer pre-construction condominium sales which will mean ultimately, fewer condominiums built in these areas over time which will tighten rental supply and direct part of it back to purpose-built rentals.

In the short term, some of these units have come into the longer-term rental market, but most will eventually make their way into the ownership market. The impact on rental product in the short term will be minor, and limited to the urban core of tourist markets where Airbnb was popular and there are few comparable purpose-built rentals.

(9) Preference for Multifamily Apartment Investments Over Other Asset Classes will drive even more capital towards apartments. Apartments have always been the lowest risk category of real estate because it is a core needs business. At no time in history have we gotten a more stark demonstration of that in comparing apartments (where people are sheltering in place and nationwide vacancies are few) to hotels where occupancy is either zero (because the hotel has shuttered) or hovering at 5-10%.

With the industrial warehouses (supporting e commerce and logistics like Amazon) the only other real exception, every other real estate class will likely be taking a hit during COVID-19 like at no other time in history. Few other industries (like groceries and drug stores) will show themselves to be as resilient as apartments during times of stress. While very few businesses will come out of COVID-19 without some bumps and bruises, it is my view that apartments will have been one of the least impacted businesses and will attract increasing interest from conservative investors. This will be very supportive of prices and liquidity in the apartment market.

SHORT- TO LONG-TERM TRENDS

Shifting now to focus on how these and other factors will affect the apartment industry in the months and years ahead, below I describe how I expect things to evolve over various time horizons.

Short-term

• Immigration flows will go down which may help relieve some of the dramatic housing shortage we have had for a short time. For a long time when I was asked how we could fix the shortage of housing, I quipped that there was one solution, that no politician would dare try "restrict immigration" because it is political suicide. As such I assessed the probability as zero. Well a pandemic was not on the horizon, so here we are. Note to self–I need to stop making tongue in cheek jokes like that. That said, this is a temporary disruption to immigration flows, and will resume to normal if not surge even more in the years ahead.



- More residents will stay in place rather than move for now. Given that market rents are so
 much higher in many markets than current in place rents, lower turnover means that large
 rental income growth will be limited for the time being.
- Rent increases are off the table for now. Most large apartment owners, Centurion included, waived rent increases during the pandemic. It was the right thing to do.
- Evictions have been deferred. Courts across the country are closed. Fears that this meant that tenants would not pay en masse proved to be unfounded. While some tenants were definitively disrupted by COVID-19, government income supports have allowed almost everyone who was going to pay their rent anyway, the means to do so.

There will be some deferrals and payment plans, but very few tenants are willing to take the risk they get evicted in a few months when there is already so little vacancy and market rents may be much higher than they are currently paying. Further, banks have reported that credit card spending has declined dramatically as discretionary spending is cut (restaurants, entertainment, travel costs, etc.) and this means that there is more money available for the core needs of food and shelter.

- Smaller landlords will be more impacted than larger landlords. If you have just one condo unit, and your tenant does not pay, and your own employment income is disrupted, you could be in real trouble. Even with a deferment of your mortgage payment, you cannot average your risk over hundreds or thousands of units like a large owner can. Further, larger owners generally have more resources than small owners. Likely some of these smaller owners will exit the business.
- Construction projects will be delayed. Even the projects that are moving ahead are going slower due to social distancing requirements and some workers or trades are not willing to work. This will serve to reduce supply coming to market and be supportive of existing rental occupancies and rents
- The cost of debt has dropped considerably for apartment owners. Only a few months ago, we were getting 10-year mortgages at 2.5%. Today the rates are closer to 1.75% and this will be very supportive of apartment values. CMHC provides mortgage insurance for apartment buildings in Canada, and this will ensure that mortgages will be more readily available and much less expensive than for other property classes.
- Rental strategy today is different for the time being. You need to be able to show units virtually. Traffic is remaining high (possibly because prospective renters have more time to shop) and leasing velocity is down about a third. We can report that more people are venturing out to see properties in person rather than virtually just in the past week. It is hard, with virtual tours to convey your properties value proposition and to maximize rents. So, in the short run, until the lockdowns end, those willing to rent now will get some discounts, but this reflects more of a rental incentive than a long-term decline in market potential rents.

Think about it this way, would you pay more or less for something that you had seen in person given the size of the spend of committing to one year of rent. That is a big purchase for anyone. So, it is reasonable to believe that once we are past the lockdown, even these modest discounts will end.

I have seen some poorly informed articles suggest that the rental market is turning in favour of renters and cite that market rents have declined month over month, but this is a shallow



analysis. First, in most markets in Canada, due to rent controls, market rents exceed in place rents by a large margin. As such, even if market rents were to decline a little, they will still likely exceed in place rents and someone moving will pay more if they do.

In markets like Toronto, where market rents can exceed in place rents by 30% or more, declining market rents do not imply reduced rental revenue when a resident turns over. In fact, just a few months ago, many landlords were offering residents bonuses to leave so their apartments could be renovated and then rented at better rates.

- Demand destruction as young people move back home or bunk together. This is not new. In all recessions, the youngest and most job insecure employees tend to lose their jobs or be unable to get jobs. Demand for bachelor units will decline. There will be more demand for two-bedroom units as people double up. Again, few people will move right now as they are trying to stay put, but when the lockdowns ease, some will move and create the turnover which is currently restricting rent growth. In tight rental markets, this will be a benefit. In loose markets, there will be work to do.
- In summary, in the short term, apartment owners are not maximizing income, so much as maintaining it. Some residents will default, as they always have, but few are willing to risk a roof over their heads for the uncertainty of having to find an apartment in a tight market where rents are likely more than they are already paying.

Medium-term

• We expect that there will be some distressed sellers which will present opportunities for long-term buyers like us. We anticipate that this distress will come from two areas. One, leveraged short-term traders who bought using high leverage, including possibly short-term bridge loans, to renovate and reposition apartments to sell later to long term holders. Some of these buyers were very aggressive in the prices they paid and the leverage they used and may become distressed sellers.

Two, development of apartments has accelerated over the past few years. Many developers, in our experience, use excess leverage and short-term bridge loans to maintain a land and development pipeline. Time delays, cost overruns, high ratio, and/or expensive leverage are headwinds that will mean that there will be deals available for those with strong balance sheets, capital and the willingness to invest. We believe that there will be significant opportunities for Centurion as a result

- We could see some distress in the purpose-built student market from weak holders of the asset class. We have not purchased new student properties in years as we saw aggressive buyers come to the market paying prices that we considered to be reckless and using leverage we considered expensive. If students are not back to school in September (we consider it unlikely that schools will remain closed), these overleveraged owners may become distressed. On the flip side, we believe that pandemic aside, that student residences are resilient to recessions, as poorer job prospects often mean that staying another year or two to continue one's studies is attractive and increases demand, all else being equal.
- I have seen some commentary recently (actually, it has been claimed for years), that elearning will accelerate and thus, reduce the demand for in-person education and student residences. We have just had the largest experiment in e-learning ever. It did not work. Not



even close. I have got two university-age children who got moved to online classes. I have got many friends with university-age children and thousands of student residents. They hated it.

I have heard of surveys suggesting that less than 5% of students found online learning to be satisfactory. Sitting through an online class, removed from your peers and working group, the social aspects of learning and being with friends, and the removal of experiences that can only happen in person have only highlighted the value of the in-person "traditional" university experience.

As a parent paying for this, it is hard to believe that for the tuition I'm paying for online classes has a fraction of the value of the in-person experience. Not only are students (and parents) getting less value in an educational sense, they are hating the experience too. Already there are class action lawsuits in the U.S. demanding refunds of tuition and residence fees (many universities evicted residents early and did not refund the fees). As such, any talk of long-term decline in demand for student residences due to e-learning is just wrong.

• Immigration will resume. If anything, Canada has increased desirability as an immigration destination of choice. President Trump has announced increased restrictions on immigration, so some of that demand will turn to Canada.

Long-term

- Construction constraints on new housing will remain in place, meaning supply will be less than needed, leading to low vacancy rates and good rental growth.
- Construction delays will restrict supply long term. Reduced condo builds will mean less shadow rental stock in the years to come. The reduced ability to sell condos may shift even more developers to building purpose-built rental, providing financing, equity investment, and long-term ownership opportunities for Centurion.
- The restrictions on Airbnb type services, will mean some of these units will now go into the long-term rental pool, competing with purpose-built apartments, but ultimately, they will likely flow to owner occupiers, as seems to be the long-term trend with condos over time.
- There will be less willingness to be as highly leveraged to own a home as has been the case recently in Canada and I believe this will drive down ownership intentions and thus, more people will look toward rental.
- Rental business will likely take up some demand from seniors/retirement residences. Since the majority of deaths in Canada seem to be in care facilities, we may see more people attempt to avoid moving into care facilities unless it becomes completely unavoidable, sending some of this demand into standard rental apartments. Technology is enabling this (think Uber Eats or meal prep services and virtual medical care). Stories of workers not showing up in seniors facilities to work due to either the fear of the workplace or because the government was paying them more to stay home than work, is the nightmare scenario on top of the nightmare scenario for residents of these facilities.
- Rents are still cheap relative to property prices so this could continue to favour rentals. While
 rents have gone up a lot in the past few years, they have still lagged the appreciation seen in
 some of these markets on single family homes and condos. As I have written before, I believe
 we are in the early stages of a secular shift towards rental and away from homeownership



and COVID-19 does not change my view of this. If anything, I believe COVID-19 will create further long-term tail winds to the business.

- Apartments will be seen as one of the safest sectors not just of real estate, but of the economy
 in general, as a basic needs industry once COVID-19 is in the rear-view mirror. I expect that
 long-term flows to apartments will increase relative to other sectors
- With declining cost of debt, I expect apartment cap rates to stay stable and likely decline long term. The same cannot be said necessarily of other sectors like retail or hotels. While the economy may bounce up after its reopening, we will not return to the glide path as before. Some businesses will not reopen, unemployment will be higher and will take time to recover. Government deficits will be higher for longer, which means taxes are likely going up to cover this and long-term economic growth may slow. This means that interest rates could be here for a long time, and that will not only support income generating assets in the short term, but long term as well.
- We have just had the largest global experiment in work-from-home (WFM) the world has
 ever seen. While many of us are keen to return to the more social environments of our office,
 at least some of the time, I believe that demand for office space, in the long term, will be
 disrupted materially. In our own case, we have always been asked by employees for flexible
 WFM options and have resisted this. We questioned the efficiency. We questioned the impact
 on team cohesion.

The lockdown has shown the world that WFM can work for many, and could probably be incorporated by many more businesses in the future. How much long-term office demand reduction will we see? Who knows? But demand is going to go down, relative to before. The flip side of this is that this may increase demand for larger apartment unit sizes if employees are allowed to work from home more often, thus saving money on travel, childcare, clothes, etc., freeing up more money for either nicer or larger units to accommodate home office WFM space.

SUMMARY

The economic uncertainty and volatility of COVID-19 will pass. Life will return to a new normal sooner than later because it has to, and because people will demand it. Apartments have shown themselves to be among the most resilient of investments in uncertain times, and their performance during COVID-19 will be no exception.

While almost no person or industry comes through this time without some bumps and bruises, the apartment industry in Canada will perform better than almost any other sector in my opinion based on the above. There will be opportunities ahead for those with strong balance sheets, access to capital, excellent operating platforms, and a willingness to execute. Centurion, I fully believe, is well placed to both protect capital and prosper in this environment.

Greg Romundt