# Commercial Property Valuation

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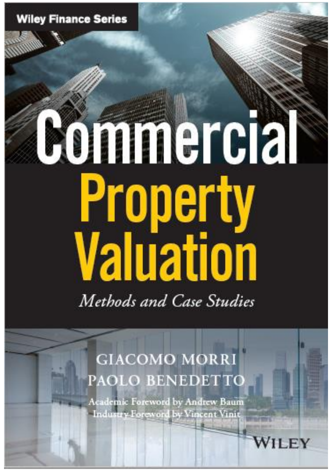
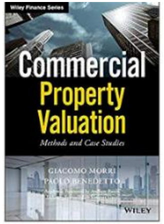
WILEY, 2019




## Development Project Appraisal

### Chapter 12

THINK BEFORE YOU PRINT

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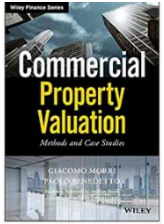
# Description of the Property

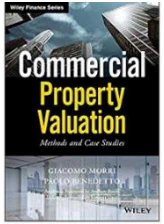



- **The subject property consists of a development area located in the Financial District neighbourhood of Manhattan in New York City**, within major employment centres, transportation nodes, the World Trade Center redevelopment and outdoor recreation areas

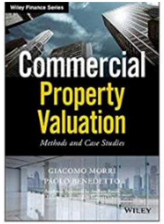
- **This desirable destination creates demand for high-end residential condos that hit the top 10% of the market by price**

- According to a feasibility study undertaken, **the HBU has been identified in a tower of 250 luxury condo units** with unrivalled views rising above the retail space located at street level, second floor and basement level

# Description of the Property




- According to the same study, a Building whose concept is developed by a premier architect has unavoidably higher costs; however, **this should be recovered in the form of higher sales prices considering (a 10% to 15% premium)**
- **The base of the residential tower will feature 1,125 m$^2$ of retail space in a highly visible corner with strong and growing pedestrian traffic**. Moreover, the proximity to important transportation hubs, covering trains and most of the subway lines, will ensure traffic from commuters and visitors, estimated to total **500,000 people per day**
- Close by, the retail portion of the World Trade Center site features approximately 30,000 m2 of retail space and includes a selection of prime tenants
- **At the date of valuation, the foundation works have been completed and there is no entitlement risk as building permits have been obtained**



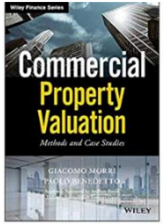

# Description of the Property

| Intended Use | # of units | Rentable / Sellable Area (sq.m.) |
|---|---|---|
| Retail | 1 | 1.125 |
| Residential | 250 | 25.728 |
| **Total** | **251** | **26.853** |

| Unit Type | % | # of units | Average size (sq.m.) | Sellable Area (sq.m.) |
|---|---|---|---|---|
| studio | 21,2% | 53 | 50 | 2.656 |
| 1-bedroom | 45,1% | 113 | 85 | 9.574 |
| 2-bedroom | 22,3% | 56 | 140 | 7.821 |
| 3-bedroom | 11,4% | 28 | 200 | 5.678 |
| **Total** | **100,0%** | **250** | **103** | **25.728** |

| Floor | Rentable Area (sq.m.) |
|---|---|
| Cellar | 300 |
| Groud | 305 |
| Second | 520 |
| **Total** | **1.125** |

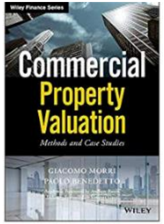
# Choice of the Valuation Method




- **The choice of a Residual Value Method prevails over the Direct Comparison Approach** because the comparable sales do not truly capture the specific features of a Development

- Among the different approaches of the Residual Value Method, **the Multiple Periods Residual Value Approach is deemed to be the most appropriate** considering the time horizon to complete the construction and sale of the mixed-use tower

# Market Analysis

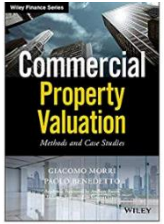



- At the date of valuation, overall development activity in the subject district has significantly increased since the recovery from subprime mortgage crisis

- Moreover, the public infrastructure projects have been improving Lower Manhattan’s accessibility and attractiveness

- **The current trend of the neighbourhood appears to be positive** with rising demand for retail, residential and office spaces

- **Economic expansion is expected to continue over the next several years**

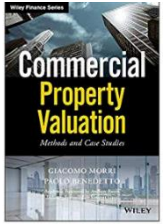



# Market Analysis

- **The New York City residential market is the largest housing market in the United States**. The majority of the market consists of rental units; however, the rising cost of development sites in Manhattan makes it harder for developers to break-even by pursuing a rental building investment strategy. **Consequently, most new developments in Manhattan are condominium projects**

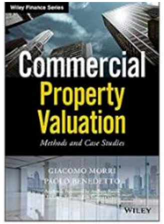
- **The luxury segment hits the top 10% of the condominium** market by price which on average, at the valuation date, is estimated to stand at over $ 30,000 per square metre in Downtown Manhattan

# Market Analysis



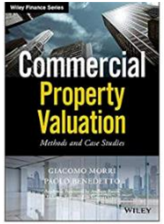

- In the upper tier of the market, units' absorption goes in parallel with construction works. This is usually the result of targeted marketing strategies
- 
- **The comparable developments exhibit predominantly units sold in the range between 146 and 257 $m^2$ or 192 $m^2$ on average**
- **The condominium average sales price ranges from a low of 21,905 $/$m^2$ to a high of 33,874 $/$m^2$, or 25,648 $/$m^2$ on average**, which should be adjusted to consider all differences in the design, finishing, location and views to correctly estimate the revenues of the subject property

# Market Analysis




| Comparable developments | # of units | Average # of sales/ month |
|---|---|---|
| 1 | 157 | 11 |
| 2 | 220 | 3 |
| 3 | 157 | 5 |
| 4 | 223 | 3 |
| 5 | 257 | 4 |
| 6 | 192 | 2 |
| 7 | 187 | 15 |
| 8 | 146 | 9 |
| **Average** | **192** | **6** |
| **High** | **257** | **15** |
| **Low** | **146** | **2** |

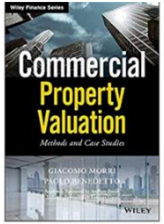
# Valuation
# Choosing the Time Horizon




- Considering that building permits have been obtained at the time of the valuation, the choice of the time horizon is based on the typical development schedule for a new residential building, estimated to fall within the range of 18 to 24 months once all approvals are granted and foundations are completed

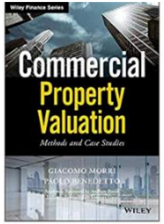
- In this specific case, **the valuation allows a period of 30 months for above-grade construction**. The contingency on the development schedule takes into account the size and complexity of the project, mainly due to the tight development site footprint which requires considerable coordination efforts during the construction phase

# Valuation
# Choosing the Time Horizon




- **The sales velocity in the market has been studied considering the main Comparable Properties in the surrounding area**

- **From the market evidence it has been inferred that on average units will be sold at a pace of 6 units per month for the subject property.** Consequently, the absorption period considered in the valuation is 18 months after construction completion. Assuming that sales will reasonably begin after a semester the building starts going vertical, with a timeline of 30 months for above-grade construction and 6 units per month absorption rate, at completion the units sold will be 144 out of 250. The remaining 106 units will take 18 months to be sold, always considering an average of 6 units per month

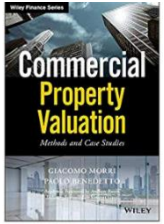



# Valuation
# Estimating the Cash Flows

- Based on the comparable analysis presented in the Section ‘Market Analysis’, **an average price of 30,000 $/m2 has been considered appropriate, and the average price per residential units results to be approximately $ 3 million**

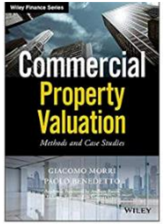
- **In addition to the subject’s residential units, the property will contain 1,125 square metres of retail space**. In order to determine the rent for the retail component, a market analysis has been carried out on comparable spaces in the surrounding area

# Valuation
# Estimating the Cash Flows




- **The resulting average rent for the ground floor is 3,285 \$/m2.** However, the subject valuation has to account for the Lower Manhattan revitalisation
- **The valuation estimates a net retail rent of 1,650 \$/m$^2$, which is a weighted average of a rent of 700 \$/m$^2$ for the cellar space,4 3,500 \$/m$^2$ for the ground floor retail space and 1,115 \$/m$^2$ for the second floor retail space.** Rent for cellar space commands a substantial discount compared to the ground floor rent, given the loss of visibility and no access to natural light
- **Typically, in New York City retail tenants sign long-term leases, ranging from 10 to 15 years.** The exit timing for the retail component in the subject’s valuation is assumed at construction completion
- Considering market data, **the valuation is based on an overall cap rate of 4.75%**

# Valuation
# Estimating the Cash Flows

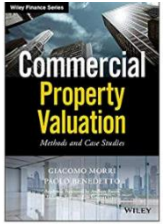



- **It is market practice to refer to Gross Buildable Areas in estimating development costs on a unitary basis**

- The total buildable area and the breakdown for intended use and it will represent the base for the calculation of cost estimates

- Comparable developments incurred in hard costs within a range from 4,960 $/m$^2$ to 11,500 $/m$^2$, or 7,070 $/m$^2$ on average. Taking into account the characteristics of the foreseen development and the estimates made by a third-party engineering company, **projected construction costs have been estimated at 8,000 $/m$^2$**

# Valuation
# Estimating the Cash Flows

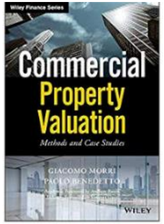



- Hard costs typically range between 70% and 80% of total development costs. **The subject property hard costs have been estimated at the top end of the range, accounting for 84% of total development costs**

- **As for the timing, usually forecasts of construction costs tend to have a peak in middle periods and moderated spending in both earlier periods and in the end tail**

- An overview of comparable data for **soft costs** indicates an average of 1,615 $/m$^2$. For the subject property they have been estimated, including architects, engineering and all other consultants**, equal to approximately 1,550 $/m$^2$**

# Valuation

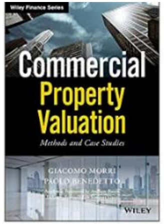



- In a transparent market such as the New York real estate market, the appropriate discount rate can be selected between the ones inferred from the market

- At the date of valuation, **it has been estimated an 8% discount rate**, since a higher market risk for a luxury condominium development with prices in the upper tier has been taken into account

- **Based upon the analysis performed in this appraisal, the Market Value of the Land is approximately $ 238.5 million**

# Valuation




| | | Above-Grade Construction | | | | | Post-construction | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | *semester* | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | |
| **Positive Cash Flows** | | | | | | | | | | |
| Residential sales revenues | $771.840.659 | $0 | $0 | $0 | $0 | $0 | $555.725.275 | $111.145.055 | $104.970.330 | ***$771.840.659*** |
| *% of units closed* | | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *72,0%* | *14,4%* | *13,6%* | |
| Retail sales revenues | $39.101.053 | $0 | $0 | $0 | $0 | $0 | $39.101.053 | $0 | $0 | ***$39.101.053*** |
| *% of units closed* | | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *100,0%* | *0,0%* | *0,0%* | |
| **Total Positive Cash Flows** | | **$0** | **$0** | **$0** | **$0** | **$0** | **$594.826.327** | **$111.145.055** | **$104.970.330** | ***$810.941.712*** |
| **Negative Cash Flows** | | | | | | | | | | |
| Hard costs (8,000 $/sq.m.) | | $36.364.144 | $72.728.289 | $84.849.670 | $72.728.289 | $36.364.144 | | | | ***$303.034.537*** |
| *Hard costs distribution in %* | | *12,0%* | *24,0%* | *28,0%* | *24,0%* | *12,0%* | | | | |
| Soft costs (1,550 $/sq.m.) | 19,38% | $7.045.553 | $14.091.106 | $16.439.624 | $14.091.106 | $7.045.553 | | | | ***$58.712.942*** |
| Developer's Profit (15% Hard & Soft costs) | 15,00% | $6.511.455 | $13.022.909 | $15.193.394 | $13.022.909 | $6.511.455 | | | | ***$54.262.122*** |
| Sales commissions | | $0 | $0 | $0 | $0 | $0 | $27.178.972 | $5.279.390 | $4.986.091 | ***$37.444.452*** |
| *Residential (4.75% of residential sales revenues)* | *4,75%* | *$0* | *$0* | *$0* | *$0* | *$0* | *$26.396.951* | *$5.279.390* | *$4.986.091* | ***$36.662.431*** |
| *Retail (2.00% of retail sales revenues)* | *2,00%* | *$0* | *$0* | *$0* | *$0* | *$0* | *$782.021* | *$0* | *$0* | ***$782.021*** |
| **Total Negative Cash Flows** | | **$49.921.152** | **$99.842.304** | **$116.482.688** | **$99.842.304** | **$49.921.152** | **$27.178.972** | **$5.279.390** | **$4.986.091** | ***$453.454.053*** |
| **Net Cash Flows** | | **-$49.921.152** | **-$99.842.304** | **-$116.482.688** | **-$99.842.304** | **-$49.921.152** | **$567.647.356** | **$105.865.665** | **$99.984.239** | ***$357.487.659*** |
| **Discount rate** | 8,00% | | | | | | | | | |
| *Time factor* | | *0,25* | *0,75* | *1,25* | *1,75* | *2,25* | *2,75* | *3,25* | *3,75* | |
| *Discount factor* | | *0,981* | *0,944* | *0,908* | *0,874* | *0,841* | *0,809* | *0,779* | *0,749* | |
| **Discounted Cash Flows** | | **-$48.969.837** | **-$94.242.496** | **-$105.799.031** | **-$87.261.570** | **-$41.983.742** | **$459.370.700** | **$82.438.091** | **$74.919.085** | ***$238.471.199*** |
| Land Market Value | $238.471.199 | | | | | | | | | |
| **Land Market Value (rounded)** | **$238.500.000** | | | | | | | | | |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