SUMMARY

This dissertation attempts at applying quantitative technique to the valuation of old property with refurbishment potential to supplement the practice of the conventional method. It frames old property with refurbishment potential as contingent claim asset where buyer has the option to refurbish the property or to abandon it in accordance to the principle of wealth maximization. The aim is to examine the applicability of option pricing theory using a two-state two-date simple binomial option pricing model. The hypothesis tested is that "the pricing of old property by option pricing method conforms to market value".

This dissertation adapts the method used by Cox, Ross and Rubinstein (1979). 40 property transactions were analysed using the following variables: price of property, cost of refurbishment, interest rate and rate of property price movements in favourable and unfavourable market conditions. They are substituted into the model to obtain an estimate of the option value of each property.
75% of the estimated option value deviate from the actual transacted price by not more than 20%. Sensitivity test of option values toward changes of other variables indicate that option value is insensitive over changes to property price movement rate but is sensitive towards the changes in the beginning period underlying asset price, exercise cost and interest in the order of descending sensitivity.