

Market Based Income Approach for Forest Valuation

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SUMMARY

According to the International Valuation Standards (IVS), valuation should be primarily based on market prices. Using market approach for forest property valuation is difficult as sold forest properties are unique by the view of forest resources. The value of forest in Finland is mainly based on the volume and the quality of the stands. They variate a great deal between properties, and the Finnish Official Purchase Price Register does not include tree stand data. Income approach is potential alternative for this kind of valuation since it takes into account the predicted growth and handling of the tree stands. However, the discount rate used in valuation affects a great deal the result of valuation. Thus, the discount rate should derive from the market so that the result could be market value. These rates (internal rate of return, IRR) are tried to be found in the master's thesis which is made for National Land Survey of Finland and Aalto University during the autumn 2016 and the winter 2017. The thesis combines approximately 1100 representative forest property transaction and their forest resource data. Forest data is provided by The Finnish Forest Centre which has produced the data from airborne laser scanning data with semi-automatic process since 2010. Data will be handled with MOTTI simulator made by Natural Resources Institute Finland. The results will be produced during 12/2016-1/2017. In addition to the internal rate of return of the property transactions, the thesis is studying how usable the forest resource data actually is for valuation purposes. If the data is usable, the results of the thesis will be used for forest valuation in proceedings of the National Land Survey of Finland.