Average Home Size and Accommodation Value

Real Estate Tech, July 1999

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This is a hypothesis: there is an inversely proportional relationship between the size of the average (private market) home and the Accommodation Value (AV) i.e. the cost of the land divided by the gross floor area which is allowed to be built on the related piece of land.

From a building / development viewpoint, the price of a home consists of: (a) land cost, (b) construction cost (for ease of illustration, professional fees, interest on loans if any, and other "soft costs" are not listed), and the developer's required profit. Hence, to calculate the price which can be offered for a piece of land (site) = price of the property (when completed) – construction cost – developer's profit = (residual) land price. Naturally, different developers would come up with different land prices for the same site due to differences in market expectations, internal resources, risk tolerance, and return expectation.

At present, the average home size in Hong Kong is (very roughly) 600 square feet (ft2) of Gross Floor Area (GFA). Assume the market price is HK\$2,400,000 = \$4,000 / ft2 GFA. Suppose this is nicely split up as follows: Profit = \$1,000 / ft2 GFA (totaling \$600,000), Construction = \$1,500 / ft2 GFA (totaling \$900,000) and Land = \$1,500 / ft2 GFA (totaling also \$900,000).

Now, say the average home size increases to 800 ft2 GFA with the market price remaining at \$2,400,000 = \$3,000 / ft2 GFA. The split may now be: Profit = \$750 / ft2 GFA (totaling \$600,000 to keep to the same profit margin), Construction = still \$1,500 / ft2 GFA (but totaling \$1,200,000) and Land = \$750 / ft2 GFA (totaling only \$600,000). Hence, with an increase of 33% in GFA (600 to 800), the AV has already dropped by 50% on a per ft2 basis (from \$1,500 to \$750) in this simple illustration. This in turn means the overall price for the site will be reduced as well for the seller or land owner.

Two questions may pop to mind: (a) why can't the construction cost per ft2 be reduced? And (b) why can't the market price of the home be increased to \$3,200,000 when it is 800 ft2 in size to keep to the \$4,000 / ft2 GFA? Answers = (a) This question is not entirely unreasonable but construction cost is generally the less elastic element in the equation i.e. it is NOT as responsive to changed circumstances than land price or profit requirement. Moreover, the fact that the average home size has increased may mean more concrete, more steel and more labor which may in turn drive up building costs assuming all things being equal. (b) This is the main point of the article = **the average home price does NOT increase or decrease with the rise or fall of the average home size** because how much a person or a family can afford or is willing to pay is a relatively fixed budget (for housing needs). This has to do with factors like the economy, employment, sentiment, financing and the like. What the market offers the purchasers depend on the geographical environment, culture, land policies, building regulations, revenue optimization and the like. For instance, the average home in the States is a 2,000 ft2 house, in Europe perhaps a 1,200 ft2 townhouse, and in Hong Kong a 600 ft2 apartment.