Matching Household Income to the Private Residential Sector

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We have come across an article recently in the media containing information on the household income distribution. Hence, out of interest and to get a very rough feel for the "match" (or "mismatch" i.e. between the number of households that could afford such homes and the existing stock) related to the private residential market, we have done some approximate calculations. Some of the interesting observations are listed below (please note the residential categories are based on those used by the government authorities i.e. Class A to E):

(A) No mismatch for the (really) luxurious residences [Class E, units roughly from 2,000 square feet ft2 and upwards] = (1) stock level is around 21,000+ units, (2) assume typical mortgage levels, interest rates and such mortgage payments to occupy no more than 30-35% of total household income based on 2,600 ft2 average unit size x $10,000 / ft2 = $26M average unit price, (3) required monthly household income is around $300,000+, (4) 1 % of households have such income = 2,081,000 households x 1% = 20,810.

(B) No mismatch for the "executive" residences [Class D, units roughly from 1,200 f2 and upwards] = (1) stock level is around 40,000+, (2) similar mortgage assumptions but 1,600 ft2 x $6,000 / ft2 = $9,600,000 average unit price, (3) required monthly household income is around $120,000, (4) 2% of households are in this range = 2,081,000 x 2% = 41,620.

(C) Some mismatch for the "middle" middle class residences [Class C, units roughly from 800 ft2 and upwards] = (1) stock level is around 100,000+, (2) similar mortgage assumptions but 1,000 ft2 x $5,000 / ft2 = $5,000,000 average unit price, (3) required monthly household income is around $60,000, (4) 4.4% of households earn this amount while another 3% earn $80,000 = 7.4% x 2,081,000 = 153,994. Assuming a "crowding out" effect, the $80,000 households may outbid the $60,000 households in competing for the Class C units.

(D) A little mismatch in the lower middle class residences [Class B, units roughly from 500 ft2 and upwards] = (1) stock level is around 460,000, (2) similar mortgage assumptions but 650 ft2 x $4,000 / ft2 = $2,600,000 average unit price, (3) required monthly household income is around $30,000, (4) 18% of households earn this amount plus another 5.5% earning $45,000 = 23.5% x 2,081,000 = 489,035.

(E) Significant mismatch* in the "first time buyer" residences [Class A, units roughly from 200 ft2 and upwards] = (1) stock level is around 360,000, (2) similar mortgage assumptions but 400 ft2 x $3,000 / ft2 = $1,200,000 average unit price, 93) required monthly income is around $15,000, (4) around 30% of households earn this amount = 30% x 2,081,000 = 624,300. *This seems a huge mismatch yet if one includes the government subsidized units of around 270,000 thus making the total number of units to become 360,000 + 270,000 = 630,000 = NO mismatch here.

Naturally, the above is only good for rough reference and readers are advised to note the following assumptions:

1) Households are assumed to (want to) live in units matching their income abilities, status and so on yet in reality, wealthy individuals may live in smaller units than they could afford and vice versa at times.

2) Affordability and the related estimates on the required household income are based on current typical residential prices yet in reality, there are households who had bought in the peak market (in 1996-1997) thus facing a much higher mortgage loan principal.

From the above and from a business point of view, there may be much hidden demand in the overall Class C sector as some potential buyers are now being forced to stay in accommodation which may be too small / remote etc for them.
