

Case Study #3 – Illustration of one exemplary example of the Financial Methodology that is used in order to determine the level of underpricing or overpricing of residential real estate property in a specified community. This example is based on the justified percentage of pre-tax household income that must be spent by the people that live in in the city in order to justify the price-level of residential real estate property in the city.

To begin the process, assume that the prospective residential real estate property buyer lives in the city of San Francisco, assume that the median household income amount in the city of San Francisco is \$50,000 dollars, and assume that the median home price amount in the city of San Francisco is \$550,000 dollars. Based on this information, the calculated benchmark proxy factor multiple for the city of San Francisco is derived by dividing the median home price amount by the median household income amount. In this case, a factor multiple of 11.0 will be used as the benchmark proxy.

In the next step of the process, the Financial Methodology will calculate the justified percentage of pre-tax household income that must be spent by the people that live in in the city of San Francisco, in order to justify the price-level of residential real estate property. To being this process, assume that the prevailing mortgage loan interest rate for a fully-amortized fixed-rate loan in the city of San Francisco is 4.5%. With this information, the Financial Methodology will determine that almost 67% of pre-tax household income would have to be spent by the people that live in the city of San Francisco in order to repay the principal and interest costs of a mortgage loan. This information is illustrated in the table below.

By using the Financial Methodology, the prospective residential real estate property buyer can evaluate the level of overpricing or underpricing of residential real estate

property in the city of San Francisco. In this example, assume that the prospective residential real estate property buyer believes that 60% of pre-tax household income is the largest amount of money that should be spent in order to repay the principal and interest costs of a mortgage loan. Since the Financial Methodology determined that approximately 67% of pre-tax household income would need to be spent by the people that live in the city of San Francisco, in order to justify the relationship between the median household income amount, the median home price amount, and the prevailing mortgage loan interest rate for a fully-amortized fixed-rate loan, the prospective residential real estate property buyer would conclude that home prices in the city of San Francisco are overpriced by approximately seven percentage points (700 basis points).

With this information, the prospective residential real estate property buyer would likely reach the conclusion that it is not appropriate to purchase residential real estate property in the city of San Francisco, because given the prevailing cost of debt in the mortgage lending environment, in conjunction with the median household income amount for the city of San Francisco, an unacceptably high percentage of pre-tax household income would have to be spent by the people that live in the city of San Francisco, in order to justify the price-level of residential real estate property.

TRUNCATED VERSION OF THE COMPREHENSIVE ARHVA FACTOR MULTIPLE TABLE								
Loan Interest Rate	Percentage of pre-tax household Income that the prospective residential real estate buyer believes is the largest amount of money that should be spent in order to repay the principal and interest costs of the loan							
	↑-Magnitude of Overpricing-↓							
	50%	60%	65%	66%	67%	68%	69%	70%
4.40%	8.32x	9.99x	10.82x	10.98x	11.15x	11.32x	11.48x	11.65x
4.45%	8.27x	9.93x	10.75x	10.92x	11.08x	11.25x	11.42x	11.58x
4.50%	8.22x	9.87x	10.69x	10.86x	11.02x	11.18x	11.35x	11.51x
4.55%	8.18x	9.81x	10.63x	10.79x	10.96x	11.12x	11.23x	11.45x