

## Analysis of the results

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To investigate the effect of host characteristics (independent variables) on Airbnb's prices (dependent variable) between cities with low inflation or high inflation, we conducted a linear regression for the low inflation, high inflation and full datasets. The output of the regressions can be found below:

Effect of host characteristics on Airbnb prices			
	Price in dollars		
	Low inflation (1)	High inflation (2)	Full dataset (3)
host_is_superhost	4.071 (3.457)	-1.275 (4.944)	1.612 (3.334)
host_has_profile_pic	11.156 (19.370)	-185.419*** (23.159)	-122.816*** (16.609)
host_identity_verified	38.024*** (4.639)	21.981*** (5.762)	27.379*** (4.071)
host_response_time_recoded	-3.724 (3.021)	10.772*** (3.526)	7.087*** (2.531)
host_response_rate_recoded	-9.960 (11.026)	-46.031*** (13.181)	-28.993*** (9.419)
host_years	-7.084*** (0.615)	5.586*** (0.797)	1.332** (0.551)
Constant	104.377*** (23.974)	270.656*** (28.142)	214.517*** (20.275)
Observations	38,494	63,850	102,344
R <sup>2</sup>	0.005	0.003	0.002
Adjusted R <sup>2</sup>	0.005	0.003	0.001
Residual Std. Error	295.235 (df = 38487)	532.903 (df = 63843)	458.680 (df = 102337)
F Statistic	34.883*** (df = 6; 38487)	33.320*** (df = 6; 63843)	25.748*** (df = 6; 102337)
Significance levels	*p<0.1; **p<0.05; ***p<0.01		

### Results

The results of the low inflation regression (1) show that the host\_identity\_verified and host\_years have a significant effect on the price. Host\_identity\_verified has a positive effect on the price of cities with low inflation. This indicates that when the host is identified the price goes up. If the host identity is verified, it can increase trust and the price can go up. However, the variable host\_years has a negative effect on the price. This means that if the

host has been a host for a longer time, the price goes down. This result is different from what we expected beforehand. In fact, it seemed more logical to us that when the host has been a host for a longer time, people are more likely to trust the host and thus the price may be increased. Nevertheless, the results of the regression show the opposite.

The results of the high\_inflation regression (2) show that host\_has\_profile\_pic, host\_identity\_verified, host\_response\_time\_recoded, host\_response\_rate\_recoded and host\_years have a significant influence on the price of the listing. So, five of the six host characteristics have a significant influence on price. However, the relationship between host\_has\_profile\_pic and price is negative. Meaning, when the host has a profile pic the price of the listing decreases. This seems unexpected. Our perception would be that a profile pic would increase trust towards the host and would therefore allow for a higher price. The same goes for host\_response\_rate\_recoded. This relationship is negative as well, which is unexpected as well. Our perception would again be that a fast response would ensure trust and would be perceived as positive and therefore allow for a higher price. The other three host characteristics do have a positive relationship with price. Meaning if the host satisfies the characteristic the price of the listing increases. This seems logical, because all the characteristics stand for things that should increase trust and would be perceived as positive.

When comparing the results of low inflation cities with high inflation cities, we see that there are many more host characteristics that have a significant effect on price in high inflation cities than in low inflation cities. This may be due to the fact that prices rise in cities with high inflation. Everything becomes more expensive so in general more factors have an impact on the price. Host characteristics might then be more important in cities with high inflation than in cities with low inflation.

The results of the full dataset regression (3) show the overall effect of host characteristics on Airbnb's price. Generally, five out of six characteristics have a significant effect on price. Thus, we can conclude from this study that host characteristics have an effect on prices. However, in the high inflation cities, host characteristics have a higher effect than in the low inflation cities.