

Chapter 3 - Data Exercise 2

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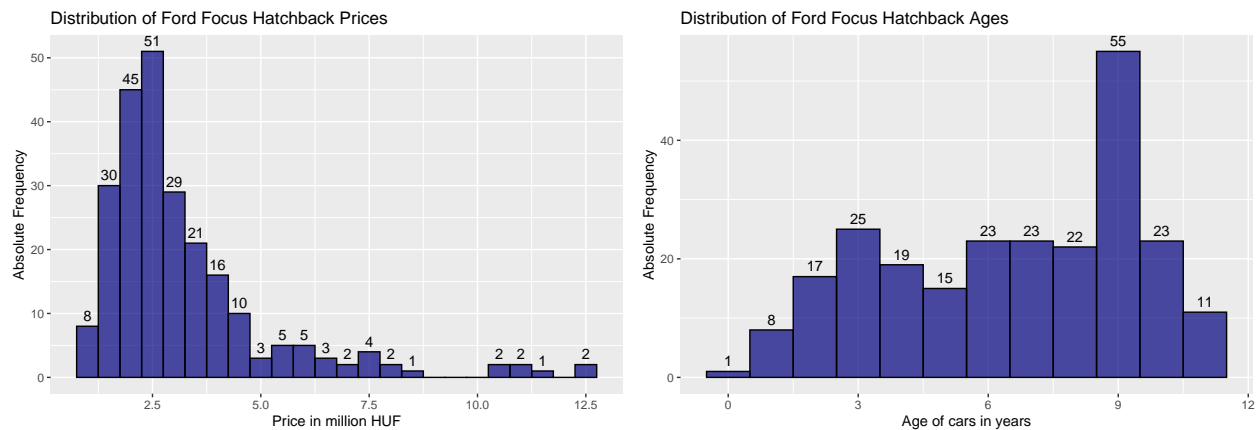
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Descriptive statistics of price and age of Ford Focus used cars

Table 1: Summary stat for Ford Focus Hatchback Age and Price
(in million HUF)

variable	mean	median	std	iq_range	min	max	skew	numObs
Price	3.23	2.65	2.03	1.71	0.88	12.69	2.29	242
Age	6.58	7.00	2.87	5.17	0.33	10.75	-0.38	242

Price and age distributions of Ford Focus cars



Summary

The results of the Ford Focus Hatchback price and age analysis are a descriptive static table and two histograms.

The first histogram shows the absolute frequency of less than 10 years old Ford Focus Hatchback prices (in million HUF) with 0.5 million HUF bins. According to the histogram and the descriptive statistics the average price is 3.23 million HUF. The median price is 2.65 million HUF, thus the histogram is skewed with a long right tail. The reason of the skewness are seven extreme values above 10 million HUF (see the observations below in Table 2). These observations are not errors, the cars are Ford Focus RS cars, which are very expensive due to their high performance above 350 HP and their extravagant outlook.

Table 2: Extreme values in Ford Focus Price distribution - Ford Focus Rs

ID	Price_mHUF	Registration_date	Kilometers	Performance_HP
345	12.69	2017	61350	349
346	12.49	2018	20500	349
347	11.39	2018	23924	349
348	10.99	2016	34000	402
349	10.90	2017	20300	349
350	10.59	2017	13736	349
351	10.45	2016	18900	349

The second histogram shows the absolute frequency of cars based on their age. According to the descriptive statistics the average age of the used Ford Focus cars on sale is around 6.58 years, which means 6 years 7 months. The median age is around 7 years, thus the histogram is skewed with a long left tail. The reason of the skewness is probably that on used cars websites older cars are more frequent than younger ones, but checking this hypothesis would be the scope of another analysis.