

Supplementary Material

Table S1. Descriptive statistics for the four indicators (n = 33 communes).

Indicator	Mean	Std. dev.	Min	25%	Median	75%	Max
Population growth	2.09	4.71	−3.56	−1.34	−0.01	5.36	13.22
New-firm formation rate (NFFR)	22.28	18.35	1.69	7.35	16.75	31.78	65.32
Public-transport accessibility	57.26	31.66	11.64	25.03	65.99	82.84	99.04
Price-to-income ratio (PIR)	7.94	2.9	4.37	5.92	7.2	9.04	17.67

Table S2. Pearson correlation matrix of key indicators with 95 % bootstrap confidence intervals [in brackets] and Benjamini–Hochberg FDR-adjusted p-values (after the semicolon) for 33 communes of Greater Casablanca. Indicators: PGR: annualized population growth, NFFR: annualized new-firm formation rate, SDG11.2: public-transport accessibility, and PIR: housing affordability.

	PGR	NFFR	SDG11.2	PIR
PGR	1.00 – –	0.85 [0.79–0.93] (0.000)	−0.76 [−0.88 – −0.62] (0.000)	−0.38 [−0.61 – −0.06] (0.034)
NFFR	0.85 [0.79–0.93] (0.000)	1.00 – –	−0.76 [−0.89 – −0.62] (0.000)	−0.43 [−0.65 – −0.19] (0.017)
SDG11.2	−0.76 [−0.88 – −0.62] (0.000)	−0.76 [−0.89 – −0.62] (0.000)	1.00 – –	0.26 [−0.01 – 0.51] (0.139)
PIR	−0.38 [−0.61 – −0.06] (0.034)	−0.43 [−0.65 – −0.19] (0.017)	0.26 [−0.01 – 0.51] (0.139)	1.00 – –

Table S3. Cluster sizes, centroid values (original units) and cluster-specific silhouette scores for the four-cluster k-means solution (n = 33 communes). Indicators: PGR: annualized population growth, NFFR: annualized new-firm formation rate, SDG11.2: public-transport accessibility, and PIR: housing affordability.

Cluster	n	Share (%)	PGR	NFFR	SDG11.2	PIR	Mean silhouette
2	14	42.4	−0.89	0.10	84.94	7.70	0.48
3	9	27.3	3.79	0.28	28.47	6.73	0.30
1	4	12.1	−2.76	0.05	78.10	13.77	0.32
4	6	18.2	9.72	0.53	23.45	6.42	0.37

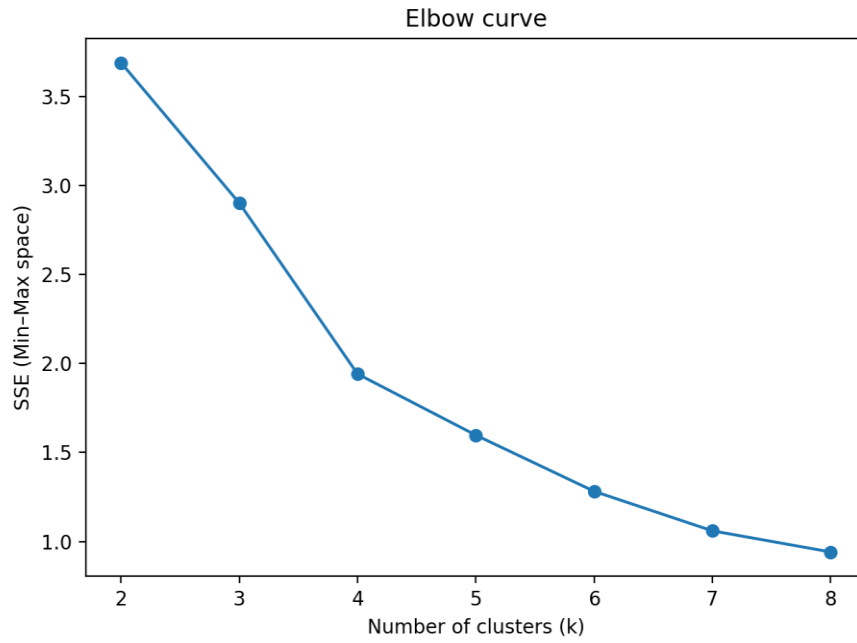


Figure S1. Elbow curve for K-mean clustering

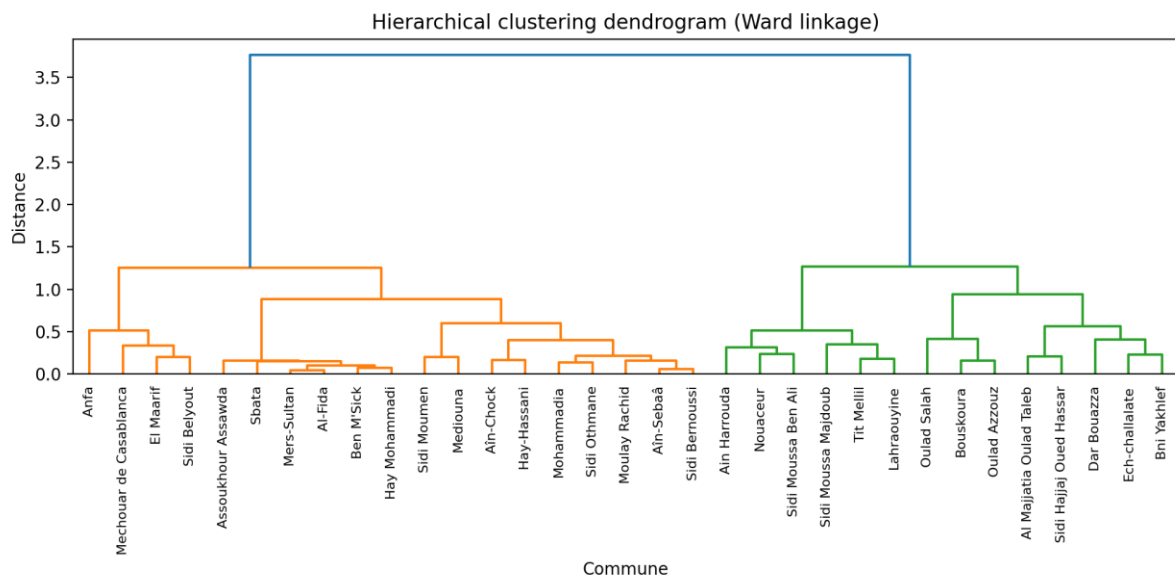


Figure S2. Dendrogram of hierarchical clustering (Ward linkage) with cut at k = 4.