

When Women Rise

At what age do women reach leadership? A SQL analysis of Wikidata — MySQL star schema, ~24,000 milestones · Kifah Owda

Question

Does the common claim that most women succeed in their late 40s to 50s hold across business, entrepreneurship and politics, and does it differ by sector and region?

Main findings

Leadership type	Women	Mean	Median	Under 40	40–59	60+
Business founder	911	34.3	32.0	74.0%	24.0%	2.0%
CEO	603	45.9	47.0	25.7%	66.2%	8.1%
Head of government	129	52.3	52.0	6.2%	66.7%	27.1%
Head of state	116	52.6	54.0	16.4%	54.3%	29.3%

- **The claim holds everywhere except entrepreneurship.** A majority of women reach CEO, head of government and head of state roles between 40 and 59 (66%, 67% and 54%). Founders are the opposite: 74% were under 40, median age at founding 32. The problem with that claim is that it treats starting a company and reaching the top of an institution as the same milestone.
- **Sector explains age far more than gender.** Age at leadership varies much more by sector than by gender in this dataset. The spread between sectors is about 18 years. Within a sector the women–men gap is under one year in every case. Women and men arrive at the same age; the difference is how few women arrive at all.
- **Women are a small minority, scarcest in politics:** 14.2% of CEOs in the data, 7.1% of founders, 4.5% of heads of state, 3.2% of heads of government.
- **The near-zero global gap hides regional differences.** In the Americas women reached political leadership 5 to 6 years later than men (n=26–27); in Europe slightly earlier; in Asia women CEOs were 4.5 years younger (n=38). These cells hold 24 to 54 women each, so they are suggestive, not established.
- **Women’s share has risen steadily and is still under a fifth:** 1.2% of leaders in the 1960s, 6.7% in the 1990s, 14.9% in the 2010s, 19.1% in the 2020s so far. Before 1950 it never exceeds 3.3%.

Age by gender, within sector

Leadership type	Women	Men	Gap	Women / Men
CEO	45.9	45.7	+0.27	603 / 3,649
Business founder	34.3	35.2	−0.97	911 / 11,980
Head of government	52.3	52.1	+0.19	129 / 3,953
Head of state	52.6	52.3	+0.33	116 / 2,483

Method and data

Wikidata (CC0) was queried **through organizations and offices** — company → founded by / CEO; country → head-of-state and head-of-government office → holders — cleaned in Python, loaded into MySQL 8 as a star schema and analysed with 12 queries (CTEs, window functions, conditional aggregation, a hand-built median). It is not a full list of women leaders: it covers those Wikidata links to a company or office. Age comes from the organization or office date, so founder age is age at the company’s inception.

Data quality

Outlier ages were traced to three causes: a company linking to a different person of the same name (born 1921, shown aged 94), a founder dated by a holding company's 2008 restructure, and 109 century-precision births ('20th century') stored as 1 January 1901. A per-sector rule flags 260 of 24,092 rows:

Leadership type	Rows	Flagged	Flagged %
CEO	4,296	43	1.00%
Business founder	13,110	212	1.62%
Head of government	4,084	2	0.05%
Head of state	2,602	3	0.12%
Total	24,092	260	1.08%

- **A first version of the rule was wrong, and the counts caught it.** Flagging pre-1850 births removed 15 to 18% of political records — genuine historical monarchs — so that test was dropped.
- **Teenage records were checked separately and kept.** The checks also showed that age errors weren't symmetrical. Suspiciously high ages often came from bad dates, but low ages could be legitimate: monarchs inherited at 17, and founders started companies at 19.
- **Excluding flagged rows left every conclusion intact.** The conclusions stayed the same after removing the flagged rows. That gives me more confidence that these data quality issues aren't driving the results.

Limitations

Crowd-sourced data with notability and recency bias; leaders without a company or office link are missing; year-only birth dates are stored as 1 January; founders of 1960 to 1979 companies are mostly missing; Europe and the Americas hold 82% of the women and 17% have no country code; samples under 20 are not interpreted; youngest and oldest values are not reported as findings because extremes are the most error-prone. Findings show association, not cause.

Recommended next work

- Compare leadership ages by sector and decade to see whether women are reaching these roles earlier in more recent cohorts
- Rerun regional cuts with a minimum-sample rule applied in the query rather than at reading time.
- Resolve the founder/CEO and government/state overlap rule, and map all gender labels into a consistent women / men / other group.
- Fill the missing country codes (about 3,000 records) to widen regional coverage, and recover 1960 to 1979 founders.

Benchmark: UN Women and IPU, Women in Politics: 2026 (11 March 2026) — 28 countries led by a woman, 22.4% of cabinet posts, 27.5% of parliamentary seats.