

# aggregate.Portfolio Cheat Sheet

The Portfolio call signature is straightforward:

`Portfolio(name, note='')[0]`

The following tables show all `m` methods, and fields or properties (used interchangeably). Comments elucidate the meaning of more obscure entries.

## 1. Specification & creation

`agg_list`, `m create_from_sample`,  
`m from_DataFrame`, `m from_dict_of_aggs`,  
`m from_Excel`, `line_name_pipe`, `line_names`,  
`line_names_ex`, `n_units`, `name`, `m nice_program`,  
`pprogram`, `program`, `spec`, `spec_ex`, `statistics`,  
`unit_names`, `unit_names_ex`,

## 2. Update

`m add_exa`, `m add_exa_details`,  
`m add_exa_sample`, `approx_freq_ge`, `approx_type`,  
`m best_bucket`, `bs`, `discretization_calc`, `m ft`,  
`m ift`, `log2`, `normalize`, `padding`,  
`m recommend_bucket`, `m remove_fuzz`, `m set_a_p`,  
`sev_calc`, `tilt_amount`, `m trim_df`, `m update`,

## 3. Moments

`agg_cv`, `agg_m`, `agg_sd`, `agg_skew`, `agg_var`,  
`est_cv`, `est_m`, `est_sd`, `est_skew`, `est_var`, `ex`,

## 4. Statistical functions

`m cdf`, `m density_sample`, `m get_stat`, `m pdf`,  
`m percentiles`, `m pmf`, `m q`, `m q_old_0_12_0`,  
`q_temp`, `m resample`, `m sample`,  
`m sample_compare`, `m sample_density_compare`,  
`m sf`, `m tvar`, `m tvar_old_0_12_0`,  
`m tvar_threshold`, `m var`, `m var_dict`,

## 5. Validation

`m audits`, `describe`, `m uat`, `m uat_differential`,  
`m uat_interpolation_functions`, `valid`,  
`validation_eps`,

## 6. Output dataframes

`audit_df`, `augmented_df`, `density_df`,  
`independent_audit_df`, `independent_density_df`,  
`m make_all`, `m make_audit_df`,  
`priority_analysis_df`, `m report`, `report_df`,  
`statistics_df`,

## 7. Reinsurance

*None*

## 8. Visualization & Exhibits

`m biv_contour_plot`,  
`EX_accounting_economic_balance_sheet`,  
`EX_multi_premium_capital`, `EX_premium_capital`,  
`figure`, `m plot`, `m plot_old`, `m scatter`,  
`m twelve_plot`,

## 9. Risk and pricing

`m accounting_economic_balance_sheet`,  
`m analysis_collateral`, `m analysis_priority`,  
`m analyze_distortion`,  
`m analyze_distortion_add_comps`,  
`m analyze_distortion_plots`,  
`m analyze_distortions`, `m apply_distortion`,  
`m apply_distortions`, `assets_2_epd`, `m bodoff`,  
`m calibrate_blends`, `m calibrate_distortion`,  
`m calibrate_distortions`, `m cotvar`, `dist_ans`,  
`distortion`, `distortion_df`, `dists`, `epd_2_assets`,  
`m equal_risk_epd`, `m equal_risk_var_tvar`,  
`m gamma`, `m gradient`, `m merton_perold`,  
`m multi_premium_capital`,  
`m natural_profit_segment_plot`,  
`m premium_capital`, `m price`, `m price_ccoc`,  
`m pricing_bounds`, `priority_capital_df`,  
`m profit_segment_plot`,  
`m stand_alone_pricing`,  
`m stand_alone_pricing_work`,

## 10. Approximations

`m approximate`, `m as_severity`, `m collapse`,  
`m fit`,

## 11. Meta

`audit_percentiles`, `hash_rep_at_last_update`,  
`info`, `m json`, `last_a`, `last_update`, `m limits`,  
`line_renamer`, `m more`,  
`premium_capital_renamer`, `renamer`, `m save`,  
`m short_renamer`, `m show_enhanced_exhibits`,  
`m snap`, `stat_renamer`, `tm_renamer`,

## Notes:

[1]: matches Aggregate

Any vectorizable input accepts numeric or iterable datatypes.

Abbreviations: gcn=gross (subject), ceded, and net;  
stats: m=mean, cv=coefficient of variation, sd=standard deviation, var=variance, skew(ness); VaR=value-at-risk