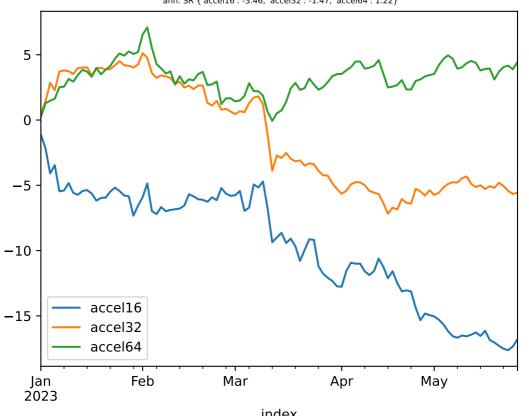
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': -41.324, 'accel32': -13.709, 'accel64': 10.949} ann. std {'accel16': -1.938, 'accel32': 9.345, 'accel64': 8.957} ann. SR {'accel16': -3.46, 'accel32': -1.47, 'accel64': 1.22}

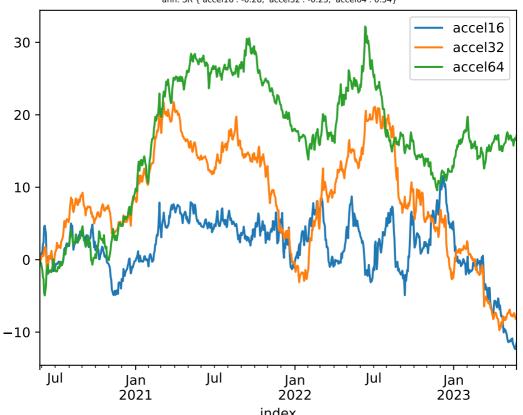


Total Trading Rule P&L for period '1Y' ann. mean {'accel16': -16.077, 'accel32': -20.961, 'accel64': -6.481} ann. std {'accel16': 15.429, 'accel32': 12.776, 'accel64': 10.221} ann. SR {'accel16': -1.04, 'accel32': -1.64, 'accel64': -0.63}

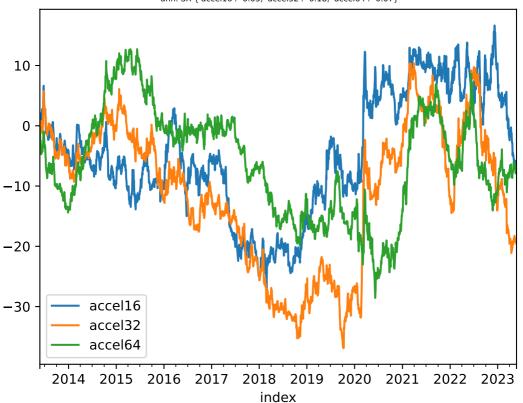


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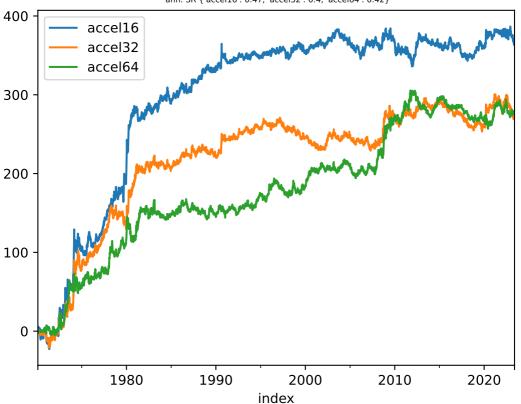
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.769, 'accel32': -2.664, 'accel64': 5.595}
ann. std {'accel16': 13.481, 'accel32': 11.737, 'accel64': 10.406}
ann. SR {'accel16': -0.28, 'accel32': -0.23, 'accel64': 0.54}



Total Trading Rule P&L for period '10Y' ann. mean {'accel16': -0.631, 'accel32': -1.914, 'accel64': -0.642} ann. std {'accel16': 11.685, 'accel32': -10.657, 'accel64': 9.316} ann. SR {'accel16': -0.05, 'accel32': -0.18, 'accel64': -0.07}

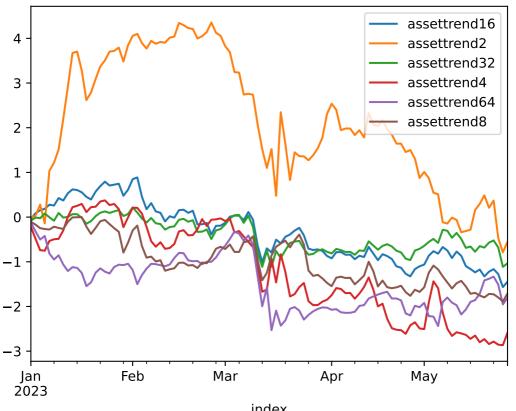


Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.693, 'accel32': 4.982, 'accel64': 5.133} ann. std {'accel16': 14.122, 'accel32': 12.446, 'accel64': 12.097} ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}



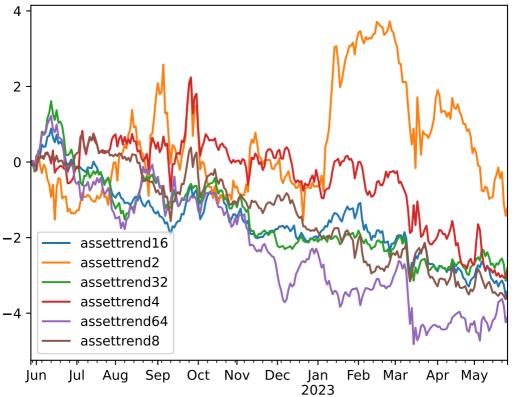
Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -3.557, 'assettrend2': -1.362, 'assettrend32': -2.55, 'assettrend4': -6.372, 'assettrend64': -4.457, 'assettrend8': -4.213} ann. std {'assettrend16': 2.468, 'assettrend2': 6.283, 'assettrend32': 2.332, 'assettrend4': 3.679, 'assettrend64': 3.369, 'assettrend8': 2.74} ann. SR {'assettrend16': -1.44, 'assettrend2': -0.22, 'assettrend32': -1.09, 'assettrend4': -1.73, 'assettrend64': -1.32, 'assettrend8': -1.54}



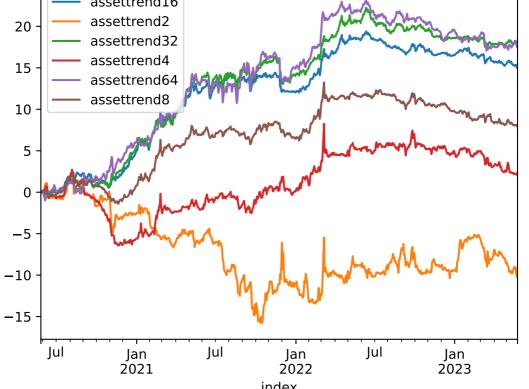
Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.361, 'assettrend2': -1.17, 'assettrend32': -3.019, 'assettrend4': -2.753, 'assettrend64': -4.038, 'assettrend8': -3.404} ann. std {'assettrend16': 2.251, 'assettrend2': 6.198, 'assettrend32': 2.497, 'assettrend4': 3.927, 'assettrend64': 3.159, 'assettrend8': 2.641} ann. SR {'assettrend16': -1.49, 'assettrend2': -0.19, 'assettrend32': -1.21, 'assettrend4': -0.7, 'assettrend64': -1.28, 'assettrend8': -1.29}



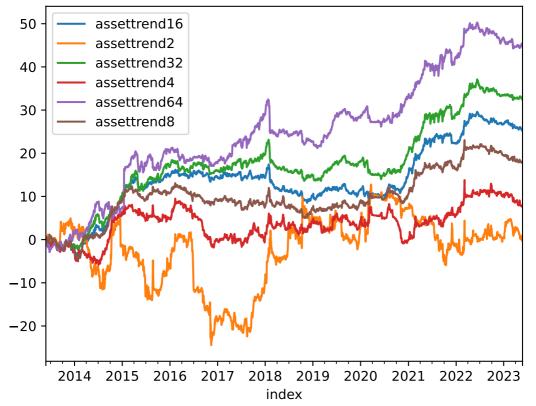
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Total Trading Rule P&L for period '3Y' ann. mean {'assettrend16': 4.945, 'assettrend2': -3.279, 'assettrend32': 5.759, 'assettrend4': 0.787, 'assettrend64': 5.828, 'assettrend8': 2.66} ann. std {'assettrend16': 3.42, 'assettrend2': 7.833, 'assettrend32': 4.133, 'assettrend4': 4.983, 'assettrend64': 5.02, 'assettrend8': 3.532} ann. SR {'assettrend16': 1.45, 'assettrend2': -0.42, 'assettrend32': 1.39, 'assettrend4': 0.16, 'assettrend64': 1.16, 'assettrend8': 0.75} 25 assettrend16 assettrend2 20 assettrend32 assettrend4 15 assettrend64 assettrend8 10



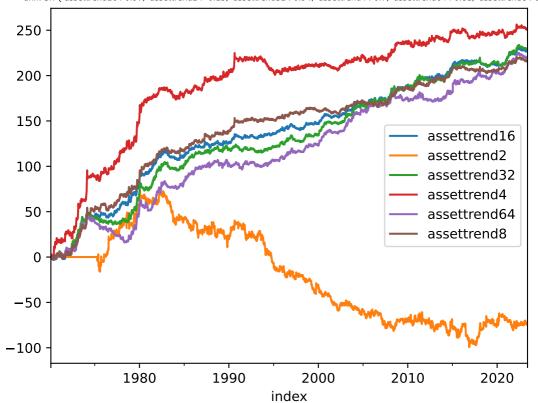
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.484, 'assettrend2': -0.015, 'assettrend32': 3.184, 'assettrend4': 0.779, 'assettrend64': 4.412, 'assettrend8': 1.758} ann. std {'assettrend16': 3.149, 'assettrend2': 9.767, 'assettrend32': 3.588, 'assettrend4': 4.973, 'assettrend64': 5.193, 'assettrend8': 3.446} ann. SR {'assettrend16': 0.79, 'assettrend2': -0.0, 'assettrend32': 0.89, 'assettrend4': 0.16, 'assettrend64': 0.85, 'assettrend8': 0.51}



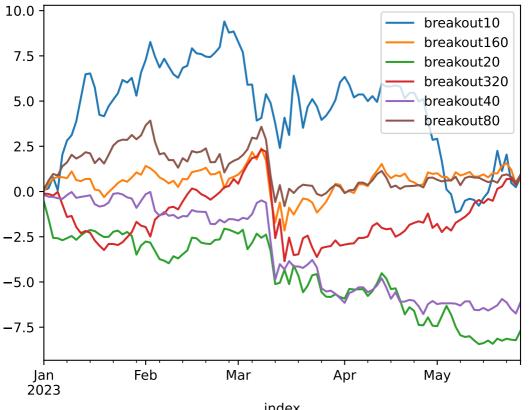
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.165, 'assettrend2': -1.381, 'assettrend32': 4.219, 'assettrend4': 4.611, 'assettrend64': 4.043, 'assettrend8': 3.968} ann. std {'assettrend16': 4.301, 'assettrend2': 10.254, 'assettrend32': 4.492, 'assettrend4': 6.543, 'assettrend64': 4.993, 'assettrend64': 6.843, 'assettrend61': 0.97, 'assettrend21': -0.13, 'assettrend21': 0.94, 'assettrend42': -0.7, 'assettrend64': 0.81, 'assettrend81': 0.86}



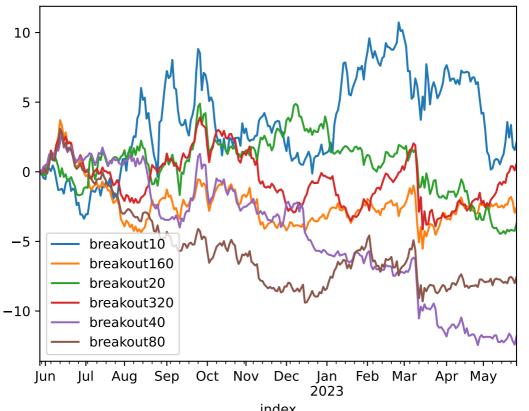
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 1.95, 'breakout160': 1.93, 'breakout20': -18.947, 'breakout320': 2.114, 'breakout40': -15.096, 'breakout80': 2.285} ann. std {'breakout10': 13.89, 'breakout160': 7.359, 'breakout20': 7.379, 'breakout320': 8.968, 'breakout40': 6.855, 'breakout80': 7.254} ann. SR {'breakout10': 0.14, 'breakout160': 0.26, 'breakout20': -2.57, 'breakout320': 0.24, 'breakout40': -2.2, 'breakout80': 0.31}



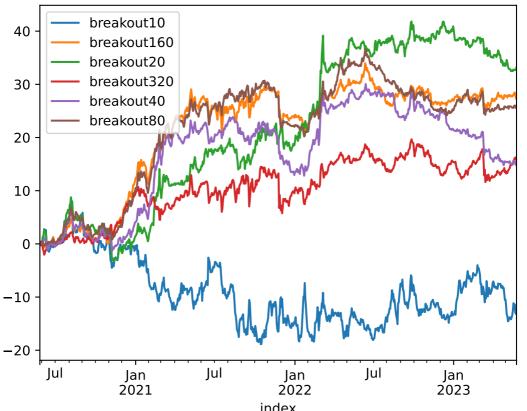
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.082, 'breakout160': -2.54, 'breakout20': -3.664, 'breakout320': 0.559, 'breakout40': -11.624, 'breakout80': -7.452} ann. std {'breakout10': 13.392, 'breakout160': 6.935, 'breakout20': 8.364, 'breakout320': 7.577, 'breakout40': 7.115, 'breakout80': 6.493} ann. SR {'breakout10': 0.16, 'breakout160': -0.37, 'breakout20': -0.44, 'breakout320': 0.07, 'breakout40': -1.63, 'breakout80': -1.5}



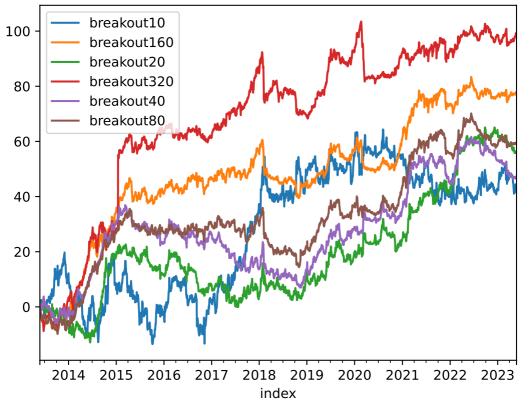
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.127, 'breakout160': 9.067, 'breakout20': 10.872, 'breakout320': 5.346, 'breakout40': 5.057, 'breakout80': 8.509} ann. std {'breakout10': 15.161, 'breakout160': 9.196, 'breakout20': 11.073, 'breakout320': 9.909, 'breakout40': 9.492, 'breakout80': 8.912} ann. SR {'breakout10': -0.27, 'breakout160': 0.99, 'breakout20': 0.98, 'breakout320': 0.54, 'breakout40': 0.53, 'breakout80': 0.95}



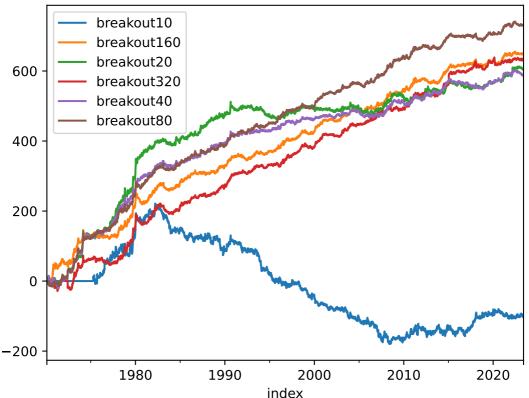
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.218, 'breakout160': 7.567, 'breakout20': 5.542, 'breakout320': 9.751, 'breakout40': 4.619, 'breakout80': 5.841} ann. std {'breakout10': 17.787, 'breakout160': 8.854, 'breakout20': 11.051, 'breakout320': 13.08, 'breakout40': 9.353, 'breakout80': 8.704} ann. SR {'breakout10': 0.24, 'breakout160': 0.85, 'breakout20': 0.5, 'breakout320': 0.75, 'breakout40': 0.49, 'breakout80': 0.67}



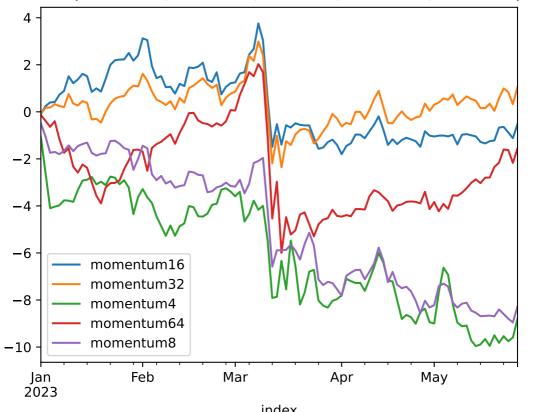
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.863, 'breakout160': 11.956, 'breakout20': 11.123, 'breakout320': 11.681, 'breakout40': 10.813, 'breakout80': 13.453} ann. std {'breakout10': 21.309, 'breakout160': 11.521, 'breakout20': 14.88, 'breakout320': 12.107, 'breakout40': 12.103, 'breakout80': 11.709} ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.89, 'breakout80': 1.15}



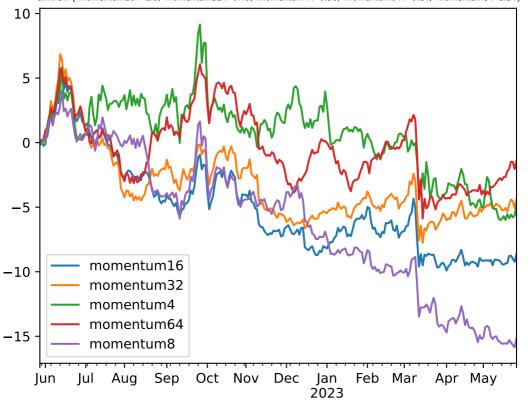
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -1.276, 'momentum32': 2.587, 'momentum4': -21.658, 'momentum64': -3.827, 'momentum8': -20.364} ann. std {'momentum16': 8.095, 'momentum32': 8.203, 'momentum4': 10.880, 'momentum64': 10.856, 'momentum8': 8.205} ann. SR {'momentum16': -0.16, 'momentum32': 0.32, 'momentum4': -2.0, 'momentum64': -0.35, 'momentum8': -2.48}



Total Trading Rule P&L for period '1Y'

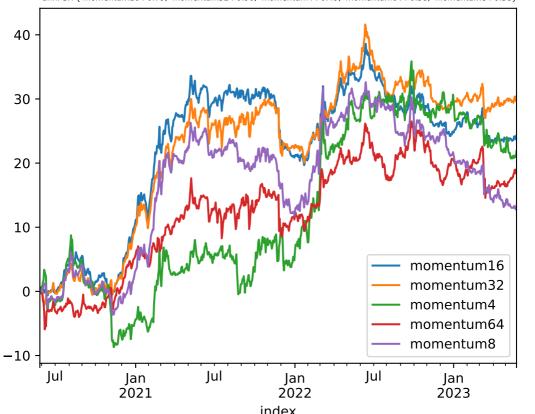
ann. mean {'momentum16': -8.495, 'momentum32': -4.275, 'momentum4': -4.762, 'momentum64': -1.409, 'momentum8': -14.925} ann. std {'momentum16': 8.486, 'momentum32': 8.806, 'momentum4': 13.173, 'momentum64': 10.158, 'momentum8': 9.697} ann. SR {'momentum16': -1.0, 'momentum82': -0.49, 'momentum4': -0.36, 'momentum64': -0.14, 'momentum8': -1.54}



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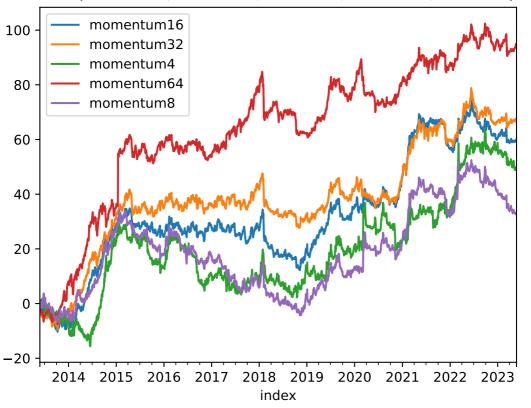
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.955, 'momentum32': 9.958, 'momentum4': 7.16, 'momentum64': 6.221, 'momentum8': 4.398} ann. std {'momentum16': 10.122, 'momentum32': 10.372, 'momentum4': 14.697, 'momentum64': 10.813, 'momentum8': 11.441} ann. SR {'momentum16': 0.79, 'momentum32': 0.96, 'momentum4': 0.49, 'momentum64': 0.58, 'momentum8': 0.38}



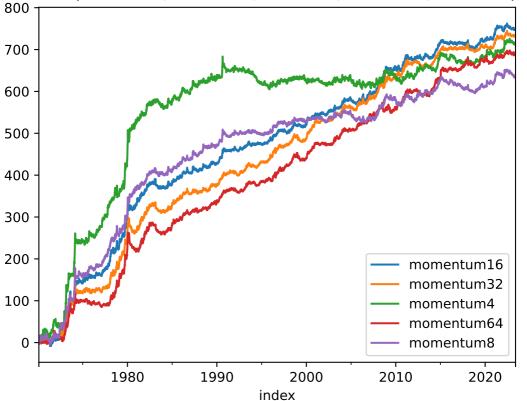
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 5.884, 'momentum32': 6.635, 'momentum4': 4.908, 'momentum64': 9.315, 'momentum8': 3.264} ann. std {'momentum16': 9.627, 'momentum32': 9.256, 'momentum4': 13.668, 'momentum64': 11.869, 'momentum8': 10.827} ann. SR {'momentum16': 0.61, 'momentum32': 0.72, 'momentum4': 0.36, 'momentum64': 0.78, 'momentum16': 0.61, 'momentum8': 0.35



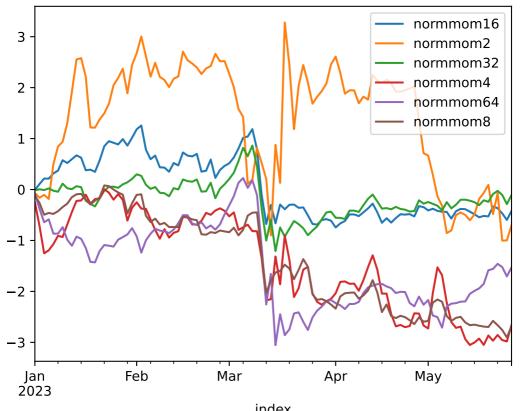
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.769, 'momentum32': 13.507, 'momentum4': 13.113, 'momentum64': 12.71, 'momentum8': 11.657} ann. std {'momentum16': 13.037, 'momentum32': 12.602, 'momentum4': 17.882, 'momentum64': 12.323, 'momentum8': 14.321} ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.81}



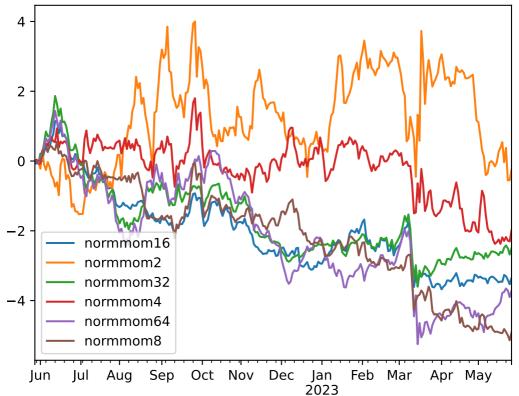
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.037, 'normmom2': -1.729, 'normmom32': -0.266, 'normmom4': -6.554, 'normmom64': -3.763, 'normmom8': -6.606} ann. std {'normmom16': 2.902, 'normmom2': 8.57, 'normmom32': 2.857, 'normmom4': 4.482, 'normmom64': 4.274, 'normmom8': 2.919} ann. SR {'normmom16': -0.36, 'normmom2': -0.2, 'normmom32': -0.09, 'normmom4': -1.46, 'normmom64': -0.88, 'normmom8': -2.26}



Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.304, 'normmom2': -0.249, 'normmom32': -2.463, 'normmom4': -1.955, 'normmom64': -3.666, 'normmom8': -4.844} ann. std {'normmom16': 2.531, 'normmom2': 7.518, 'normmom32': 2.829, 'normmom4': 4.342, 'normmom64': 3.83, 'normmom8': 2.884} ann. SR {'normmom16': -1.31, 'normmom2': -0.03, 'normmom32': -0.87, 'normmom4': -0.45, 'normmom64': -0.96, 'normmom8': -1.68}



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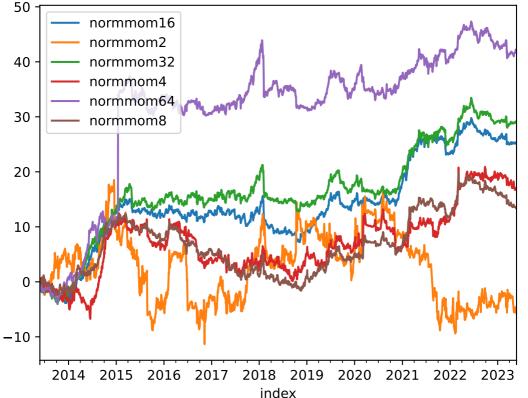
Total Trading Rule P&L for period '3Y' ann. mean {'normmom16': 3.634, 'normmom2': -5.805, 'normmom32': 4.27, 'normmom4': 2.286, 'normmom64': 2.479, 'normmom8': 2.082}

ann. std {'normmom16': 3.507, 'normmom2': 8.665, 'normmom32': 3.874, 'normmom4': 5.415, 'normmom64': 4.255, 'normmom8': 3.941} ann. SR {'normmom16': 1.04, 'normmom2': -0.67, 'normmom32': 1.1, 'normmom4': 0.42, 'normmom64': 0.58, 'normmom8': 0.53} 15 10 5 0 **-**5 normmom16 -10normmom2 normmom32 -15normmom4 normmom64 -20normmom8 Jul Jul Jul Jan Jan Jan 2021 2022 2023

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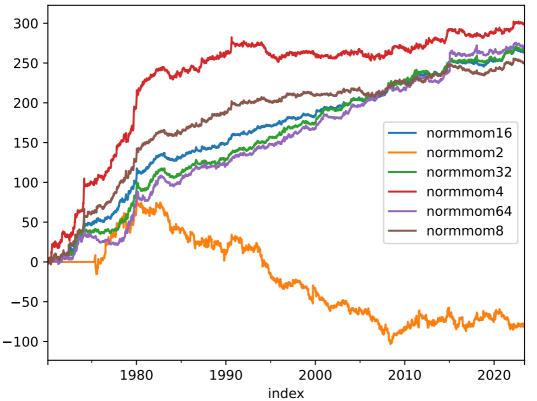
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.48, 'normmom2': -0.531, 'normmom32': 2.856, 'normmom4': 1.679, 'normmom64': 4.139, 'normmom8': 1.327} ann. std {'normmom16': 3.455, 'normmom2': 10.311, 'normmom32': 3.615, 'normmom4': 5.445, 'normmom64': 8.271, 'normmom8': 3.871} ann. SR {'normmom16': 0.72, 'normmom2': -0.05, 'normmom32': 0.79, 'normmom4': 0.31, 'normmom64': 0.5, 'normmom8': 0.34}



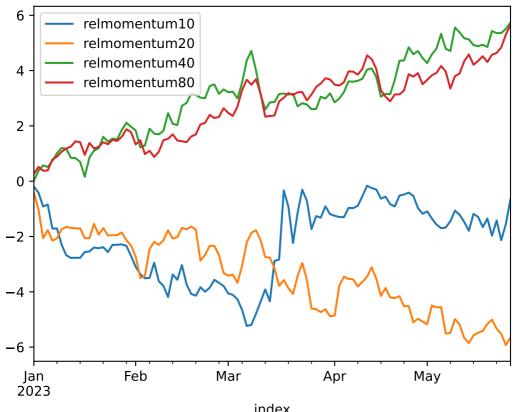
Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.855, 'normmom2': -1.497, 'normmom32': 4.912, 'normmom4': 5.494, 'normmom64': 4.98, 'normmom8': 4.593} ann. std {'normmom16': 4.529, 'normmom2': 11.604, 'normmom32': 4.606, 'normmom4': 7.38, 'normmom64': 5.866, 'normmom8': 5.361} ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}



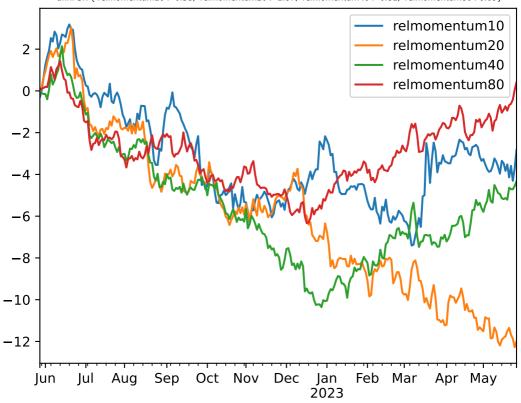
Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.599, 'relmomentum20': -13.912, 'relmomentum40': 14.134, 'relmomentum80': 13.936} ann. std {'relmomentum10': 7.852, 'relmomentum20': 6.43, 'relmomentum40': 5.295, 'relmomentum80': 4.409} ann. SR {'relmomentum10': -0.2, 'relmomentum20': -2.16, 'relmomentum40': 2.67, 'relmomentum80': 3.16}



Total Trading Rule P&L for period '1Y'

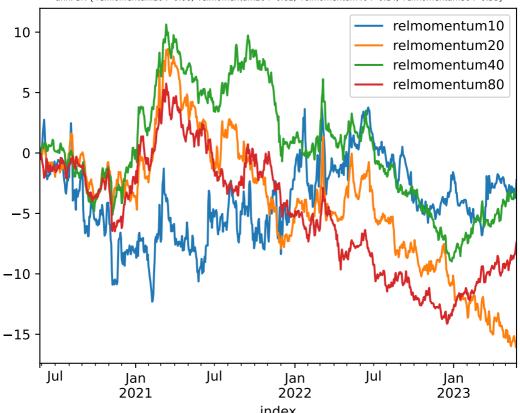
ann. mean {'relmomentum10': -2.778, 'relmomentum20': -11.811, 'relmomentum40': -4.26, 'relmomentum80': 0.398} ann. std {'relmomentum10': 7.302, 'relmomentum20': 6.328, 'relmomentum40': 5.273, 'relmomentum80': 4.603} ann. SR {'relmomentum10': -0.38, 'relmomentum20': -1.87, 'relmomentum40': -0.81, 'relmomentum80': 0.09}



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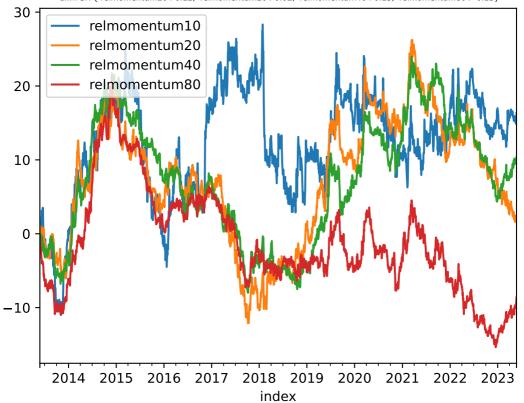
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.73, 'relmomentum20': -5.169, 'relmomentum40': -0.968, 'relmomentum80': -2.419} ann. std {'relmomentum10': 11.946, 'relmomentum20': 8.376, 'relmomentum40': 6.975, 'relmomentum80': 6.326} ann. SR {'relmomentum10': -0.06, 'relmomentum20': -0.62, 'relmomentum40': -0.14, 'relmomentum80': -0.38}



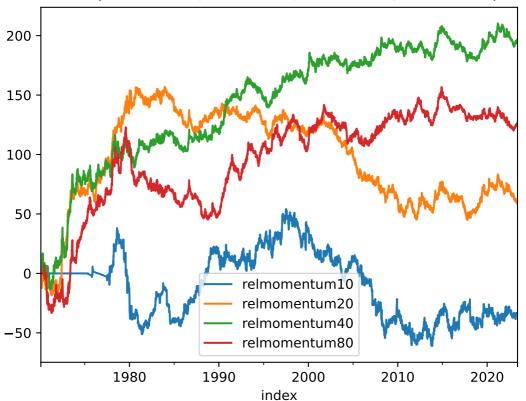
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.604, 'relmomentum20': 0.18, 'relmomentum40': 1.017, 'relmomentum80': -0.845} ann. std {'relmomentum10': 13.372, 'relmomentum20': 8.532, 'relmomentum40': 6.991, 'relmomentum80': 6.351} ann. SR {'relmomentum10': 0.12, 'relmomentum20': 0.02, 'relmomentum40': 0.15, 'relmomentum80': -0.13}

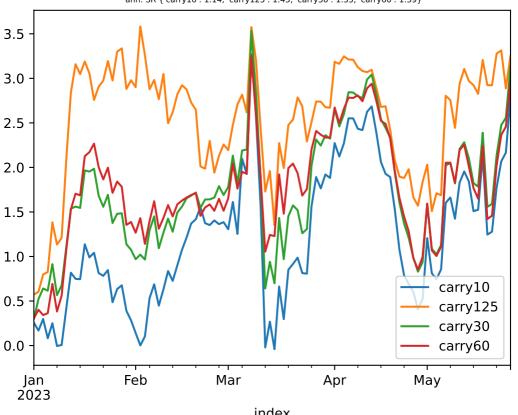


Total Trading Rule P&L for period '99Y'

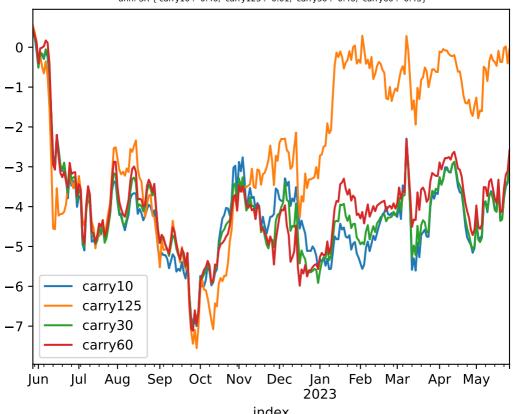
ann. mean {'relmomentum10': -0.623, 'relmomentum20': 1.084, 'relmomentum40': 3.62, 'relmomentum80': 2.334} ann. std {'relmomentum10': 13.381, 'relmomentum20': 10.463, 'relmomentum40': 9.633, 'relmomentum80': 9.777} ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': 6.871, 'carry125': 8.01, 'carry30': 7.713, 'carry60': 7.327} ann. std {'carry10': 6.049, 'carry125': 5.534, 'carry30': 5.703, 'carry60': 5.274} ann. SR {'carry10': 1.14, 'carry125': 1.45, 'carry30': 1.35, 'carry60': 1.39}

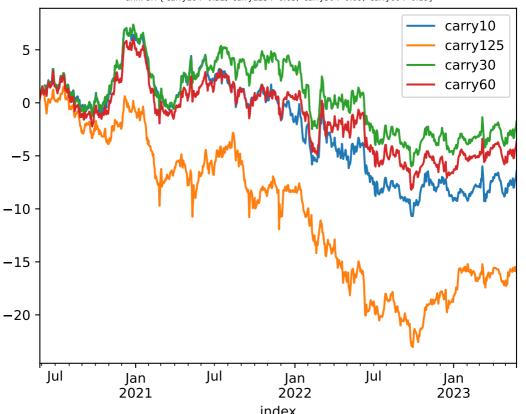


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.731, 'carry125': -0.038, 'carry30': -2.739, 'carry60': -2.548}
ann. std {'carry10': 5.98, 'carry125': 6.351, 'carry30': 5.953, 'carry60': 5.892}
ann. SR {'carry10': -0.46, 'carry125': -0.01, 'carry30': -0.46, 'carry60': -0.43}

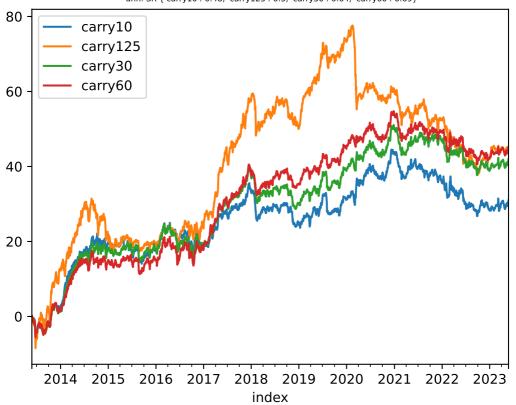


Total Trading Rule P&L for period '3Y'

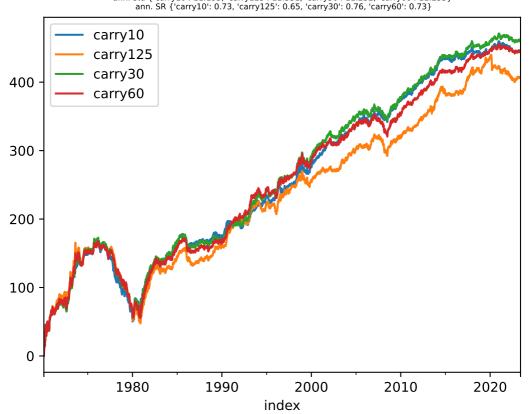
ann. mean {'carry10': -2.116, 'carry125': -5.084, 'carry30': -0.573, 'carry60': -1.204} ann. std {'carry10': 6.563, 'carry125': 8.016, 'carry30': 6.497, 'carry60': 6.493} ann. SR {'carry10': -0.32, 'carry125': -0.63, 'carry30': -0.09, 'carry60': -0.19}



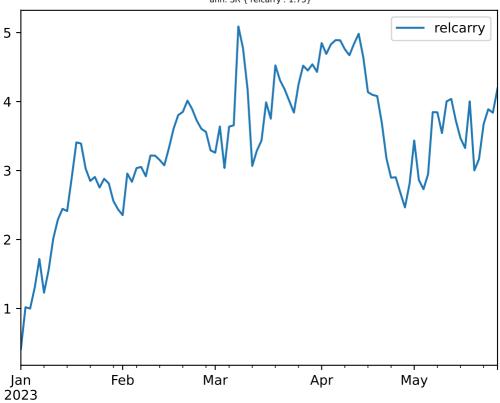
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 3.042, 'carry125': 4.436, 'carry30': 4.114, 'carry60': 4.42} ann. std {'carry10': 6.377, 'carry125': 8.938, 'carry30': 6.462, 'carry60': 6.405} ann. SR {'carry10': 0.48, 'carry125': 0.5, 'carry30': 0.64, 'carry60': 0.69}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.216, 'carry125': 7.503, 'carry30': 8.504, 'carry60': 8.214}
ann. std {'carry10': 11.195, 'carry125': 11.551, 'carry30': 11.252, 'carry60': 11.255}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}

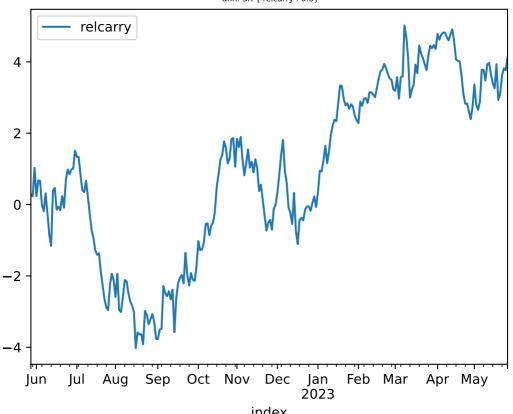


Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': 10.317} ann. std {'relcarry': 5.974} ann. SR {'relcarry': 1.73}

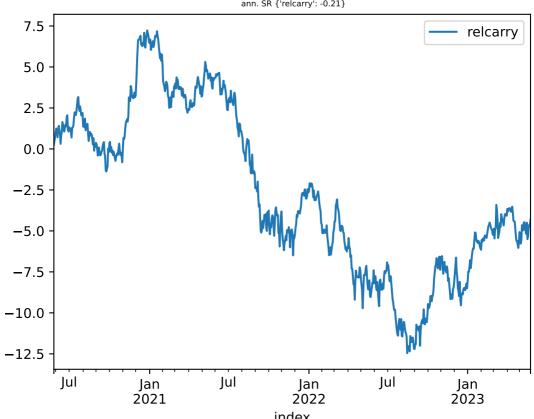


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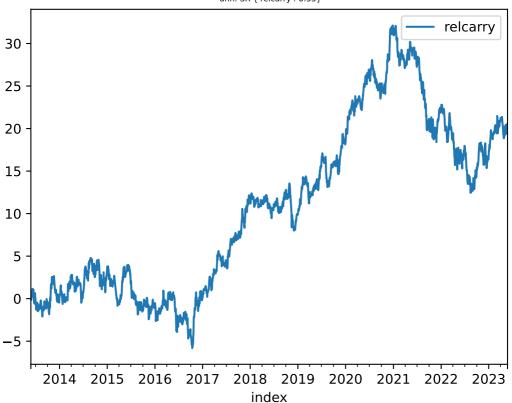
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': 4.058} ann. std {'relcarry': 6.804} ann. SR {'relcarry': 0.6}



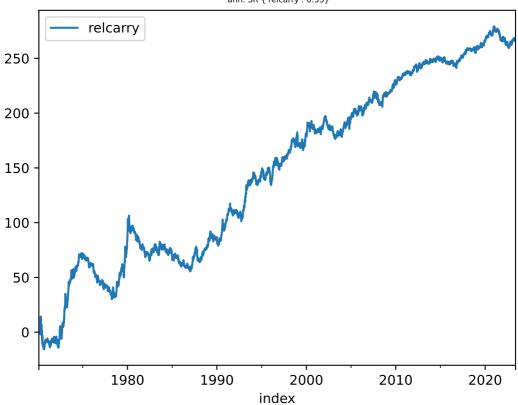
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': -1.412} ann. std {'relcarry': 6.716} ann. SR {'relcarry': -0.21}



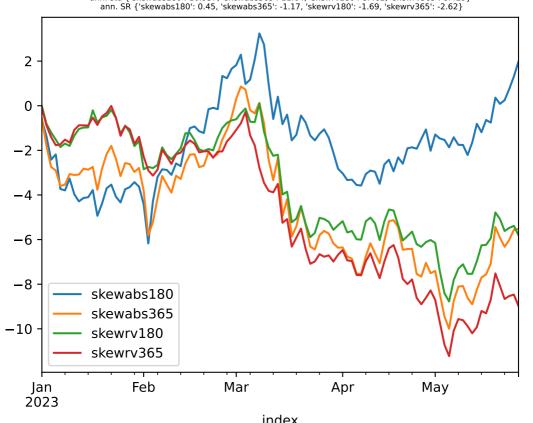
Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 2.02} ann. std {'relcarry': 5.829} ann. SR {'relcarry': 0.35}



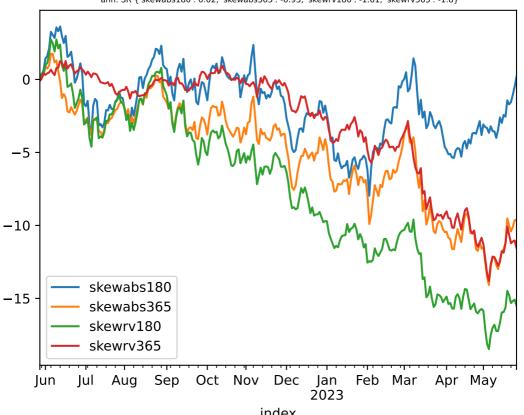
Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 4.926} ann. std {'relcarry': 8.958} ann. SR {'relcarry': 0.55}



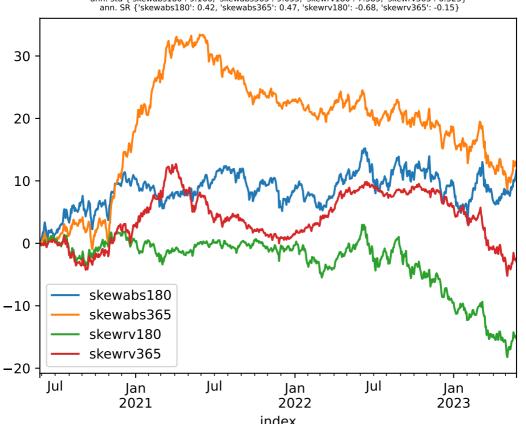
Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 4.882, 'skewabs365': -13.576, 'skewrv180': -14.285, 'skewrv365': -22.103}
ann. std {'skewabs180': 10.937, 'skewabs365': 11.64, 'skewrv180': 8.462, 'skewrv365': 8.429}
ann. SR {'skewabs180': 0.45, 'skewabs365': -1.17, 'skewrv180': -1.69, 'skewrv365': -2.62}



Total Trading Rule P&L for period '1Y' ann. mean {'skewabs180': 0.185, 'skewabs365': -9.456, 'skewrv180': -15.267, 'skewrv365': -11.368} ann. std {'skewabs180': 11.13, 'skewabs365': 10.167, 'skewrv180': 9.493, 'skewrv365': 6.306} ann. SR {'skewabs180': 0.02, 'skewabs365': -0.93, 'skewrv180': -1.61, 'skewrv365': -1.8}



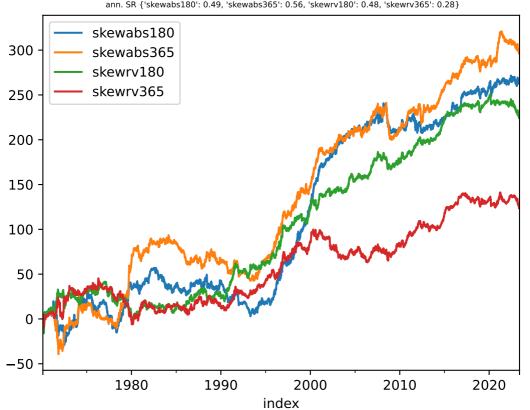
Total Trading Rule P&L for period '3Y' ann. mean {'skewabs180': 3.856, 'skewabs365': 4.297, 'skewrv180': -4.995, 'skewrv365': -0.972} ann. std {'skewabs180': 9.166, 'skewabs365': 9.055, 'skewrv180': 7.385, 'skewrv365': 6.525}



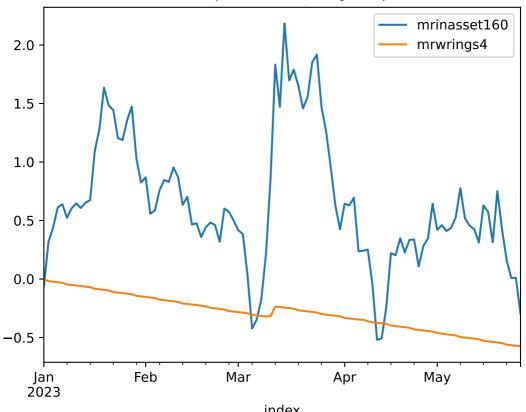
Total Trading Rule P&L for period '10Y' ann. mean {'skewabs180': 5.09, 'skewabs365': 6.747, 'skewrv180': 2.816, 'skewrv365': 2.541} ann. std {'skewabs180': 8.037, 'skewabs365': 7.985, 'skewrv180': 6.433, 'skewrv365': 6.097} ann. SR {'skewabs180': 0.63, 'skewabs365': 0.84, 'skewrv180': 0.44, 'skewrv365': 0.42}



Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.934, 'skewabs365': 5.532, 'skewrv180': 4.178, 'skewrv365': 2.311}
ann. std {'skewabs180': 10.098, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.128}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewry365': 0.28}



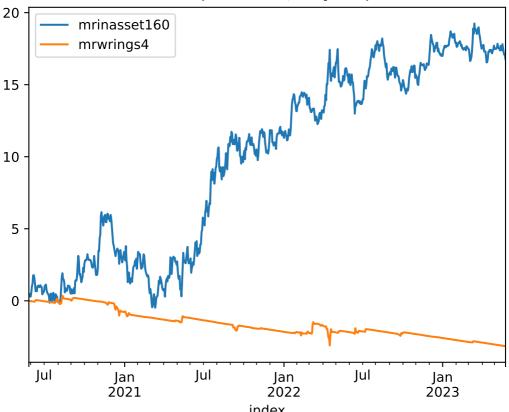
Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': -0.731, 'mrwrings4': -1.412} ann. std {'mrinasset160': -4.078, 'mrwrings4': 0.15} ann. SR {'mrinasset160': -0.18, 'mrwrings4': -9.39}



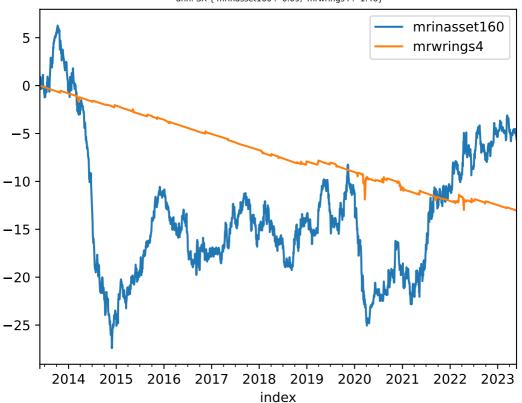
Total Trading Rule P&L for period '17' ann. mean {'mrinasset160': 0.819, 'mrwring\$4': -0.983} ann. std {'mrinasset160': 4.78, 'mrwring\$4': 0.574} ann. SR {'mrinasset160': 0.17, 'mrwring\$4': -1.71}



Total Trading Rule P&L for period '3Y' ann. mean {'mrinasset160': 5.49, 'mrwrings4': -1.03} ann. std {'mrinasset160': 6.273, 'mrwrings4': 1.017} ann. SR {'mrinasset160': 0.88, 'mrwrings4': -1.01}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.548, 'mrwrings4': -1.28} ann. std {'mrinasset160': 6.18, 'mrwrings4': 0.879} ann. SR {'mrinasset160': -0.09, 'mrwrings4': -1.46}



Total Trading Rule P&L for period '99Y' ann. mean {'mrinasset160': -3.581, 'mrwrings4': -2.188} ann. std {'mrinasset160': 9.861, 'mrwrings4': 2.086} ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.05}

