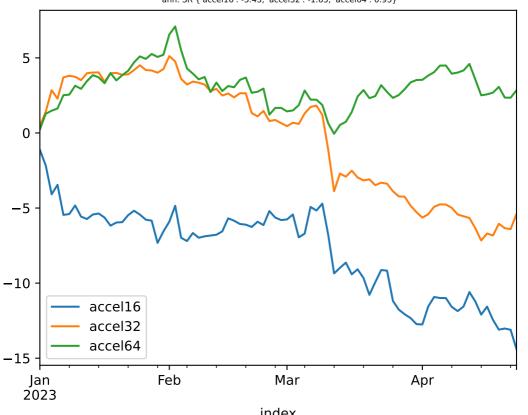
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': -44.951, 'accel32': -16.841, 'accel64': 8.877} ann. std {'accel16': 13.117, 'accel32': 10.2, 'accel64': 9.499} ann. SR {'accel16': -3.43, 'accel32': -1.65, 'accel64': 0.93}

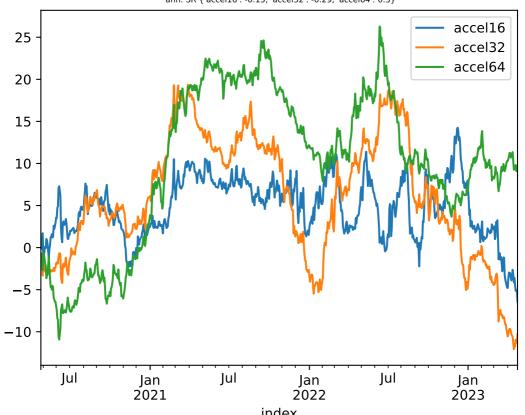


Total Trading Rule P&L for period '1Y' ann. mean {'accel16': -10.292, 'accel32': -18.874, 'accel64': -6.729} ann. std {'accel16': 16.114, 'accel32': 13.084, 'accel64': 10.79} ann. SR {'accel16': -0.64, 'accel32': -1.44, 'accel64': -0.62}

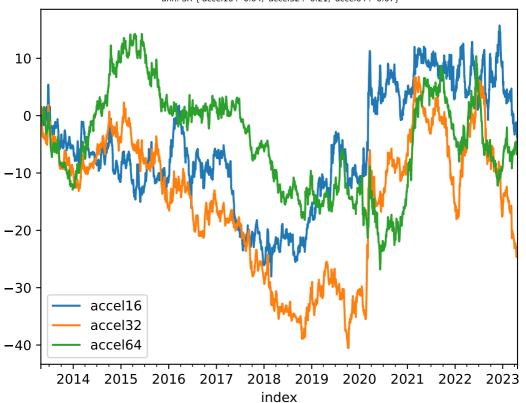


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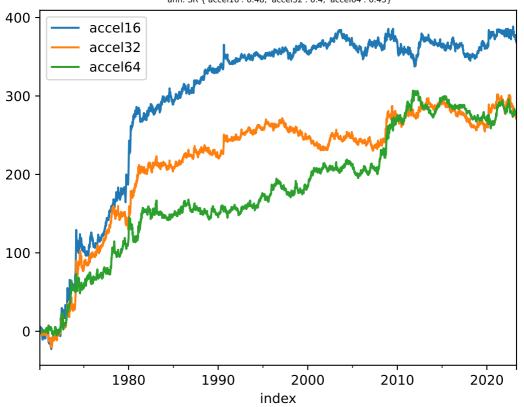
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.107, 'accel32': -3.372, 'accel64': 3.142}
ann. std {'accel16': 13.665, 'accel32': -11.786, 'accel64': 10.626}
ann. SR {'accel16': -0.15, 'accel32': -0.29, 'accel64': 0.3}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.486, 'accel32': -2.246, 'accel64': -0.619}
ann. std {'accel16': 11.718, 'accel32': -0.21, 'accel64': 9.333}
ann. SR {'accel16': -0.04, 'accel32': -0.21, 'accel64': -0.07}

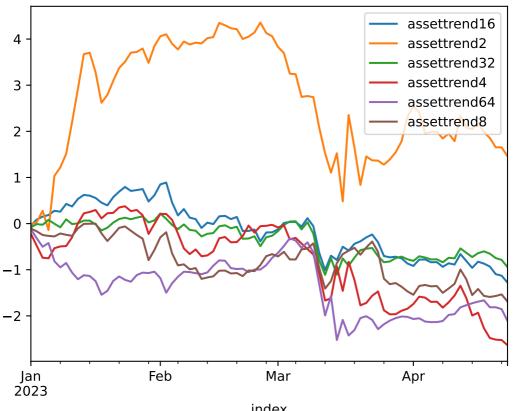


Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.783, 'accel32': 5.021, 'accel64': 5.146} ann. std {'accel16': 14.131, 'accel32': 12.454, 'accel64': 12.104} ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}



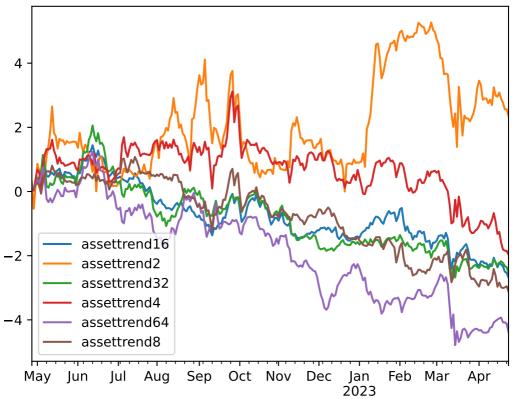
Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -3.991, 'assettrend2': 4.555, 'assettrend32': -2.947, 'assettrend4': -8.225, 'assettrend64': -6.588, 'assettrend8': -5.28} ann. std {'assettrend16': 2.553, 'assettrend2': 6.602, 'assettrend32': 2.298, 'assettrend4': 3.628, 'assettrend64': 3.358, 'assettrend8': 2.903} ann. SR {'assettrend16': -1.56, 'assettrend2': 0.69, 'assettrend32': -1.28, 'assettrend4': -2.27, 'assettrend64': -1.96, 'assettrend8': -1.82}



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

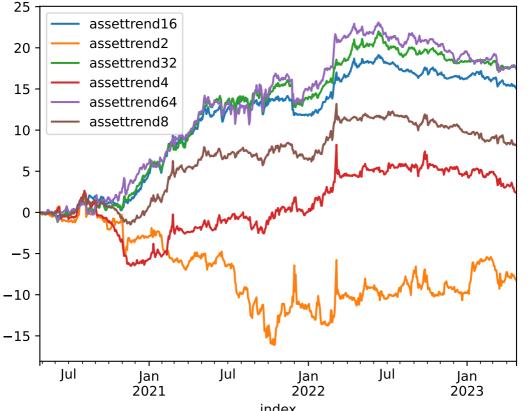
ann. mean {'assettrend16': -2.639, 'assettrend2': 2.331, 'assettrend32': -2.479, 'assettrend4': -1.933, 'assettrend64': -4.307, 'assettrend8': -3.063} ann. std {'assettrend16': 2.305, 'assettrend2': 6.405, 'assettrend32': 2.625, 'assettrend4': 3.987, 'assettrend64': 3.149, 'assettrend8': 2.66} ann. SR {'assettrend16': -1.15, 'assettrend2': 0.36, 'assettrend32': -0.94, 'assettrend4': -0.48, 'assettrend64': -1.37, 'assettrend8': -1.15}



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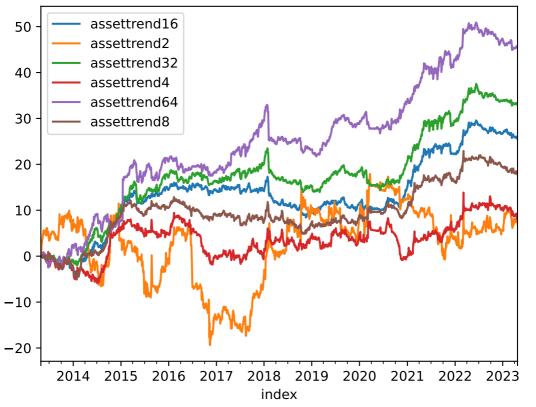
Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.915, 'assettrend2': -2.72, 'assettrend32': 5.706, 'assettrend4': 0.764, 'assettrend64': 5.719, 'assettrend8': 2.65} ann. std {'assettrend16': 3.407, 'assettrend2': 7.797, 'assettrend32': 4.12, 'assettrend4': 4.943, 'assettrend64': 4.995, 'assettrend8': 3.516} ann. SR {'assettrend16': 1.44, 'assettrend2': -0.35, 'assettrend32': 1.38, 'assettrend4': 0.15, 'assettrend64': 1.14, 'assettrend8': 0.75}



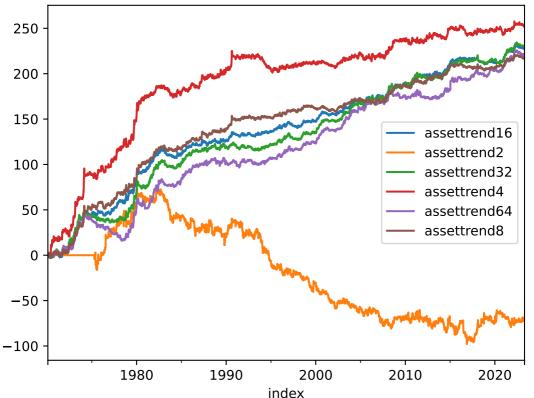
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.5, 'assettrend2': 0.696, 'assettrend32': 3.238, 'assettrend4': 0.783, 'assettrend64': 4.448, 'assettrend8': 1.75} ann. std {'assettrend16': 3.152, 'assettrend2': 9.784, 'assettrend32': 3.589, 'assettrend4': 4.969, 'assettrend64': 5.19, 'assettrend8': 3.452} ann. SR {'assettrend16': 0.79, 'assettrend2': 0.07, 'assettrend32': 0.9, 'assettrend4': 0.16, 'assettrend64': 0.86, 'assettrend8': 0.51}



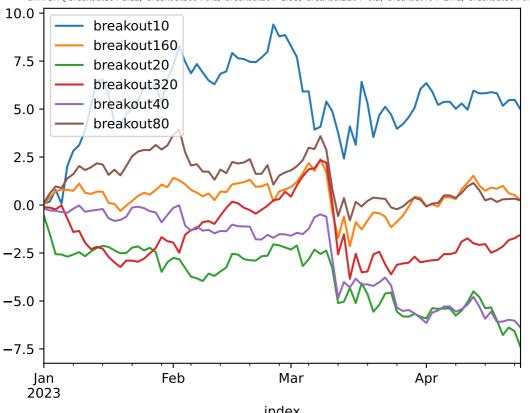
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.189, 'assettrend2': -1.319, 'assettrend32': 4.238, 'assettrend4': 4.64, 'assettrend64': 4.057, 'assettrend8': 3.99} ann. std {'assettrend16': 4.304, 'assettrend2': 10.259, 'assettrend32': 4.495, 'assettrend4': 6.547, 'assettrend64': 4.995, 'assettrend8': 4.633} ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}



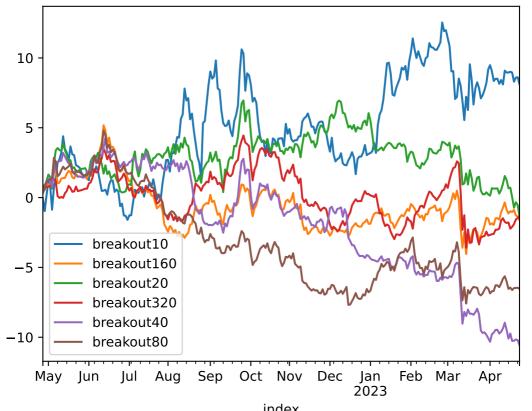
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 15.567, 'breakout160': 0.795, 'breakout20': -23.125, 'breakout320': -4.84, 'breakout40': -19.945, 'breakout80': 0.762} ann. std {'breakout10': 13.919, 'breakout160': 7.906, 'breakout20': 7.829, 'breakout320': 9.648, 'breakout40': -7.366, 'breakout80': 7.934} ann. SR {'breakout10': 1.12, 'breakout160': 0.1, 'breakout20': -2.95, 'breakout320': -0.5, 'breakout40': -2.71, 'breakout80': 0.1}



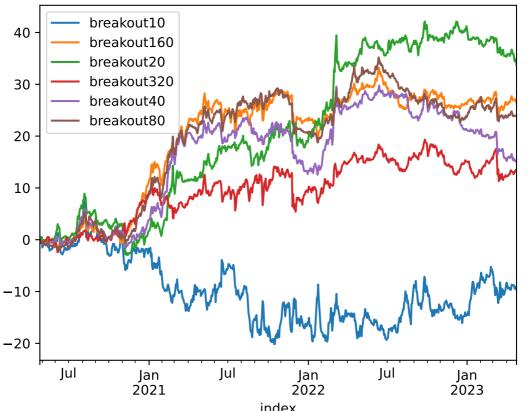
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 7.992, 'breakout160': -1.602, 'breakout20': -1.338, 'breakout320': -1.272, 'breakout40': -10.404, 'breakout80': -6.437} ann. std {'breakout10': 13.356, 'breakout160': 7.034, 'breakout20': 8.628, 'breakout320': 7.53, 'breakout40': 7.243, 'breakout80': 6.786} ann. SR {'breakout10': 0.6, 'breakout160': -0.23, 'breakout20': -0.16, 'breakout320': -0.17, 'breakout40': -1.44, 'breakout80': -0.95}

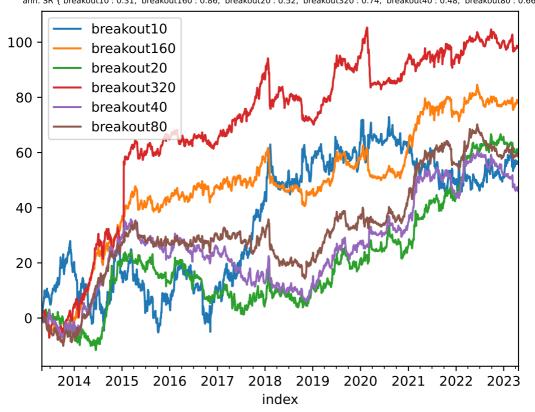


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.158, 'breakout160': 8.651, 'breakout20': 11.068, 'breakout320': 4.45, 'breakout40': 4.891, 'breakout80': 7.817} ann. std {'breakout10': 15.053, 'breakout160': 9.174, 'breakout20': 11.049, 'breakout320': 9.895, 'breakout40': 9.471, 'breakout80': 8.902} ann. SR {'breakout10': -0.21, 'breakout160': 0.94, 'breakout20': 1.0, 'breakout320': 0.45, 'breakout40': 0.52, 'breakout80': 0.88}

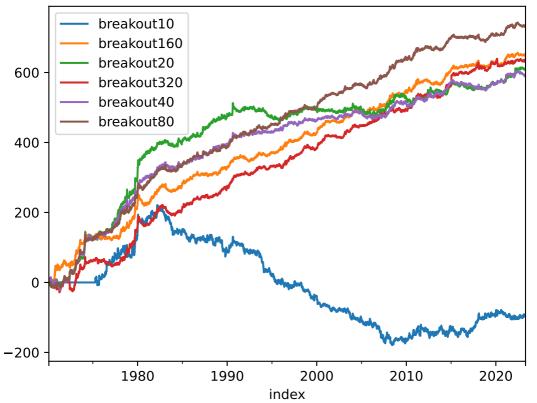


Total Trading Rule P&L for period '10Y'
ann. mean {'breakout10': 5.485, 'breakout160': 7.64, 'breakout20': 5.73, 'breakout320': 9.711, 'breakout40': 4.506, 'breakout80': 5.783}
ann. std {'breakout10': 17.811, 'breakout160': 8.873, 'breakout20': 11.088, 'breakout320': 13.086, 'breakout40': 9.391, 'breakout80': 8.732}
ann. SR {'breakout10': 0.31, 'breakout160': 0.86, 'breakout20': 0.52, 'breakout320': 0.74, 'breakout40': 0.48, 'breakout80': 0.66}



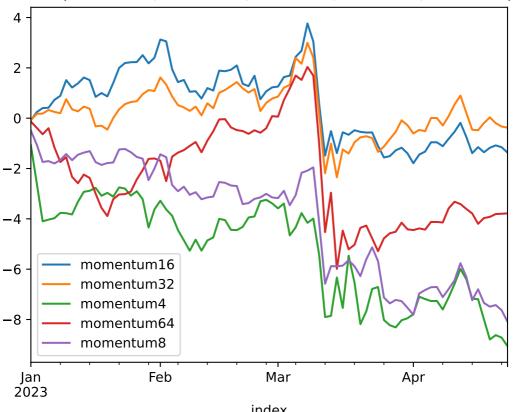
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.757, 'breakout160': 11.984, 'breakout20': 11.18, 'breakout320': 11.671, 'breakout40': 10.851, 'breakout80': 13.49} ann. std {'breakout10': 21.319, 'breakout160': 11.529, 'breakout20': 14.89, 'breakout320': 12.114, 'breakout40': 12.112, 'breakout80': 11.717} ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}



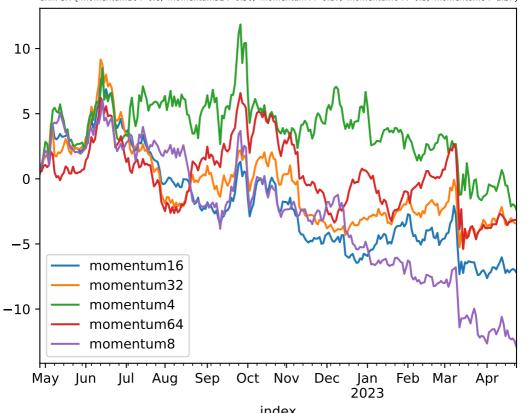
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -4.271, 'momentum32': -1.175, 'momentum4': -28.282, 'momentum64': -11.809, 'momentum8': -25.257} ann. std {'momentum16': 8.826, 'momentum32': 8.839, 'momentum4': 11.147, 'momentum61': 11.833, 'momentum8': 8.769} ann. SR {'momentum16': -0.48, 'momentum32': -0.13, 'momentum14': -2.54, 'momentum16': -1.04, 'momentum18': -2.88}



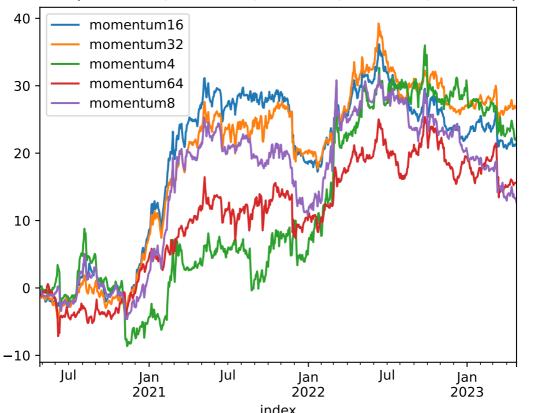
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -7.097, 'momentum32': -3.386, 'momentum4': -2.354, 'momentum64': -3.095, 'momentum8': -12.724} ann. std {'momentum16': 8.828, 'momentum32': 9.288, 'momentum4': 13.528, 'momentum64': 10.0244, 'momentum8': 10.047} ann. SR {'momentum16': -0.8, 'momentum32': -0.36, 'momentum4': -0.17, 'momentum64': -0.3, 'momentum8': -1.27}



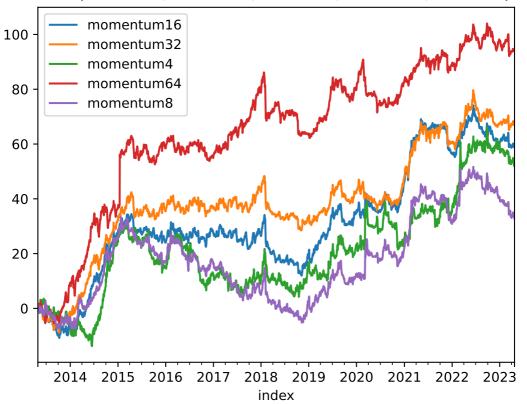
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.889, 'momentum32': 8.72, 'momentum4': 7.123, 'momentum64': 5.122, 'momentum8': 4.149} ann. std {'momentum16': 10.127, 'momentum32': 10.389, 'momentum4': 14.628, 'momentum64': 10.823, 'momentum8: 11.411} ann. SR {'momentum16': 0.68, 'momentum32': 0.84, 'momentum4': 0.49, 'momentum64': 0.47, 'momentum8': 0.36}



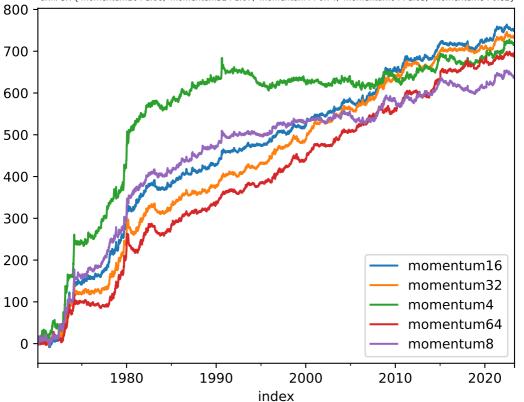
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 5.795, 'momentum32': 6.588, 'momentum4': 5.094, 'momentum64': 9.259, 'momentum8': 3.213} ann. std {'momentum16': 9.664, 'momentum32': 9.276, 'momentum4': 13.679, 'momentum64': 11.871, 'momentum8': 10.869} ann. SR {'momentum16': 0.6, 'momentum32': 0.71, 'momentum4': 0.37, 'momentum64': 0.78, 'momentum8': 0.3}



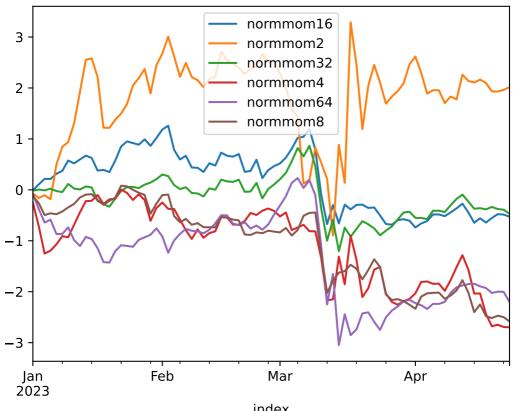
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.808, 'momentum32': 13.526, momentum4': 13.168, 'momentum64': 12.71, 'momentum8': 11.711} ann. std {'momentum16': 13.046, 'momentum32': 12.01, 'momentum4': 17.892, 'momentum64': 12.331, 'momentum8': 14.331} ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}



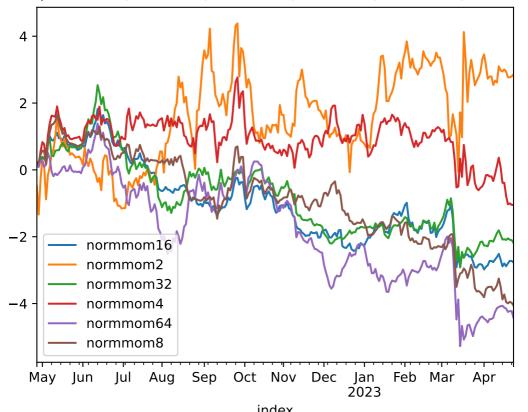
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.647, 'normmom2': 6.292, 'normmom32': -1.467, 'normmom4': -8.425, 'normmom64': -6.875, 'normmom8': -8.062} ann. std {'normmom16': 3.175, 'normmom2': 9.116, 'normmom32': 3.108, 'normmom4': 4.519, 'normmom64': 4.612, 'normmom8': 3.103} ann. SR {'normmom16': -0.52, 'normmom2': 0.69, 'normmom32': -0.47, 'normmom4': -1.86, 'normmom64': -1.49, 'normmom8': -2.6}



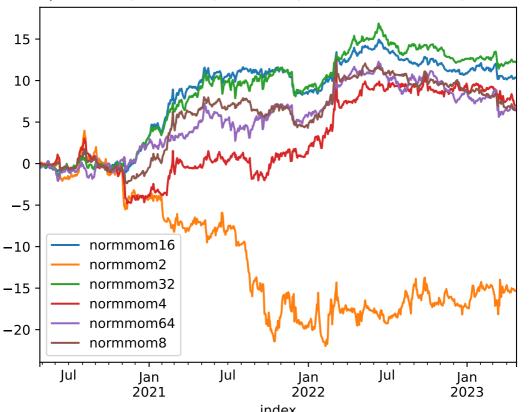
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.727, 'normmom2': 2.811, 'normmom32': -2.15, 'normmom4': -1.035, 'normmom64': -4.36, 'normmom8': -3.998} ann. std {'normmom16': 2.62, 'normmom2': 7.653, 'normmom32': 2.912, 'normmom4': 4.375, 'normmom64': 3.819, 'normmom8': 2.992} ann. SR {'normmom61': -1.04, 'normmom2': 0.37, 'normmom32': -0.74, 'normmom4': -0.24, 'normmom64': -1.14, 'normmom8': -1.34}



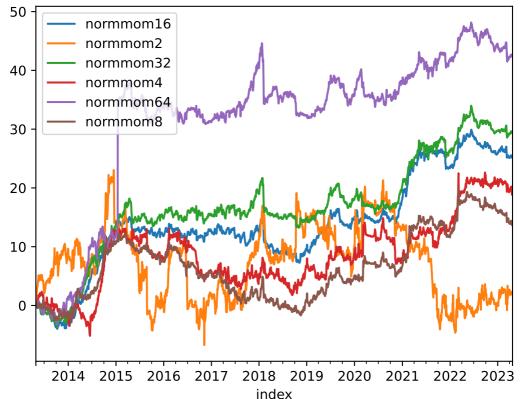
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.382, 'normmom2': -4.991, 'normmom32': 3.981, 'normmom4': 2.278, 'normmom64': 2.116, 'normmom8': 2.081} ann. std {'normmom16': 3.508, 'normmom2': 8.614, 'normmom32': 3.877, 'normmom4': 5.368, 'normmom64': 4.276, 'normmom8': 3.926} ann. SR {'normmom16': 0.96, 'normmom2': -0.58, 'normmom32': 1.03, 'normmom4': 0.42, 'normmom64': 0.49, 'normmom8': 0.53}



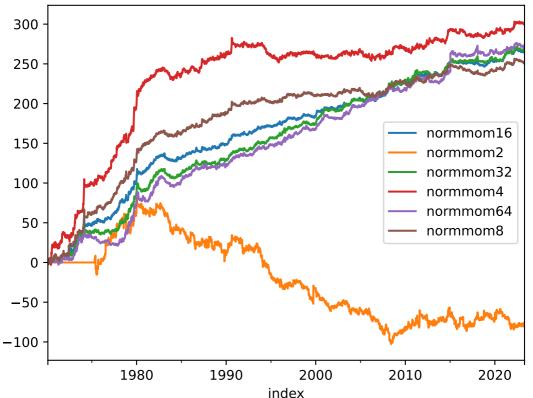
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.485, 'normmom2': 0.206, 'normmom32': 2.875, 'normmom4': 1.848, 'normmom64': 4.157, 'normmom8': 1.338} ann. std {'normmom16': 3.466, 'normmom2': 10.32, 'normmom32': 3.623, 'normmom4': 5.443, 'normmom64': 8.272, 'normmom8': 3.883} ann. SR {'normmom16': 0.72, 'normmom2': 0.02, 'normmom32': 0.79, 'normmom4': 0.34, 'normmom64': 0.5, 'normmom8': 0.34}



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

ann. mean {'normmom16': 4.876, 'normmom2': -1.43, 'normmom32': 4.926, ⁱnormmom4': 5.523, 'normmom64': 4.991, 'normmom8': 4.618} ann. std {'normmom16': 4.532, 'normmom2': 11.61, 'normmom32': 4.609, 'normmom4': 7.384, 'normmom64': 5.87, 'normmom8': 5.365} ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

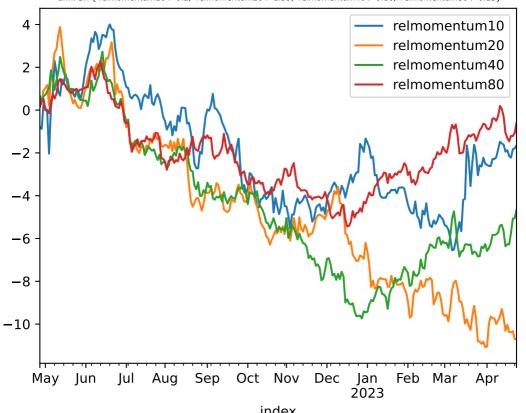


Total Trading Rule P&L for period 'YTD' ann. mean {'relmomentum10': -0.996, 'relmomentum20': -14.117, 'relmomentum40': 14.952, 'relmomentum80': 11.759} ann. std {'relmomentum10': 8.158, 'relmomentum20': 6.606, 'relmomentum40': 5.355, 'relmomentum80': 4.335} ann. SR {'relmomentum10': -0.12, 'relmomentum20': -2.14, 'relmomentum40': 2.79, 'relmomentum80': 2.71}



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

ann. mean {'relmomentum10': -1.62, 'relmomentum20': -10.558, 'relmomentum40': -4.589, 'relmomentum80': -0.589} ann. std {'relmomentum10': 8.063, 'relmomentum20': 6.632, 'relmomentum40': 5.365, 'relmomentum80': 4.539} ann. SR {'relmomentum10': -0.2, 'relmomentum20': -1.59, 'relmomentum40': -0.86, 'relmomentum80': -0.13}



Total Trading Rule P&L for period '3Y' ann. mean {'relmomentum10': -0.381, 'relmomentum20': -5.116, 'relmomentum40': -1.863, 'relmomentum80': -4.317} ann. std {'relmomentum10': 11.914, 'relmomentum20': 8.341, 'relmomentum40': 6.952, 'relmomentum80': 6.344} ann. SR {'relmomentum10': -0.03, 'relmomentum20': -0.61, 'relmomentum40': -0.27, 'relmomentum80': -0.68} 10 5 -10relmomentum10 relmomentum20 -15relmomentum40 relmomentum80

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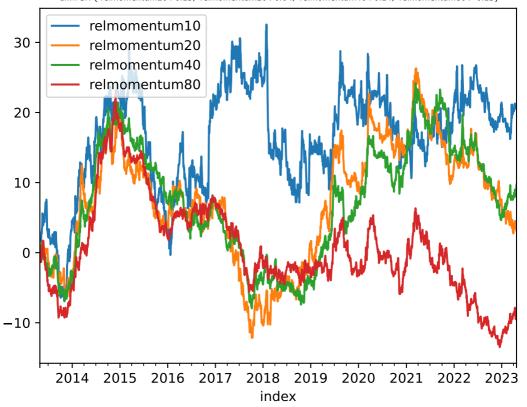
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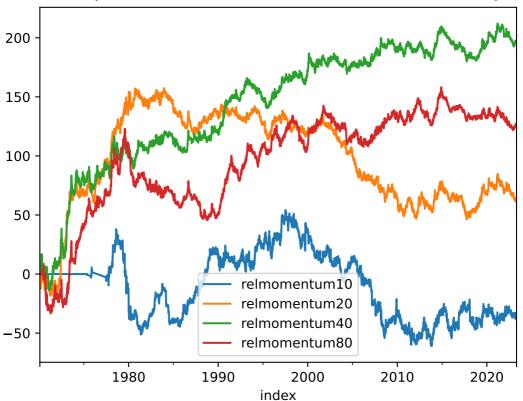
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 2.073, 'relmomentum20': 0.304, 'relmomentum40': 0.954, 'relmomentum80': -0.848} ann. std {'relmomentum10': 13.411, 'relmomentum20': 8.571, 'relmomentum40': 7.009, 'relmomentum80': 6.387} ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.04, 'relmomentum40': 0.14, 'relmomentum80': -0.13}

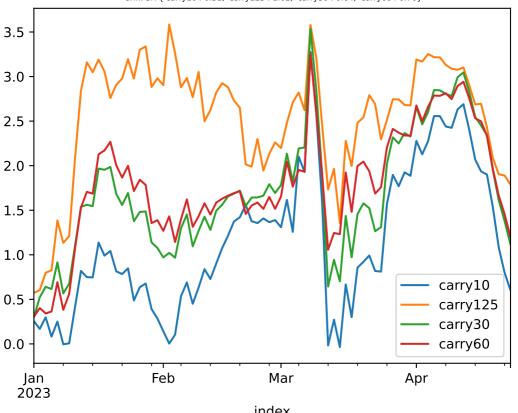


Total Trading Rule P&L for period '99Y'

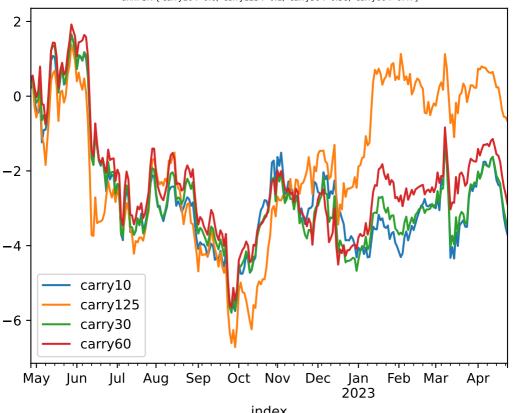
ann. mean {'relmomentum10': -0.608, 'relmomentum20': 1.135, 'relmomentum40': 3.645, 'relmomentum80': 2.333} ann. std {'relmomentum10': 13.39, 'relmomentum20': 10.468, 'relmomentum40': 9.639, 'relmomentum80': 7.83} ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': 1.882, 'carry125': 5.584, 'carry30': 3.484, 'carry60': 3.735} ann. std {'carry10': 5.979, 'carry125': 5.49, 'carry30': 5.476, 'carry60': 4.891} ann. SR {'carry10': 0.31, 'carry125': 1.02, 'carry30': 0.64, 'carry60': 0.76}

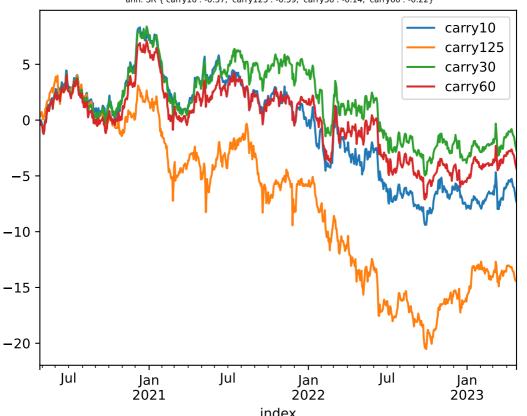


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.651, 'carry125': -0.654, 'carry30': -3.504, 'carry60': -2.846}
ann. std {'carry10': 6.088, 'carry125': 6.697, 'carry30': 6.056, 'carry60': 6.01}
ann. SR {'carry10': -0.6, 'carry125': -0.1, 'carry30': -0.58, 'carry60': -0.47}

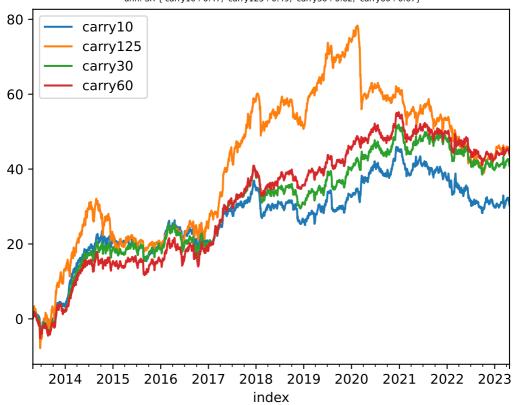


Total Trading Rule P&L for period '3Y'

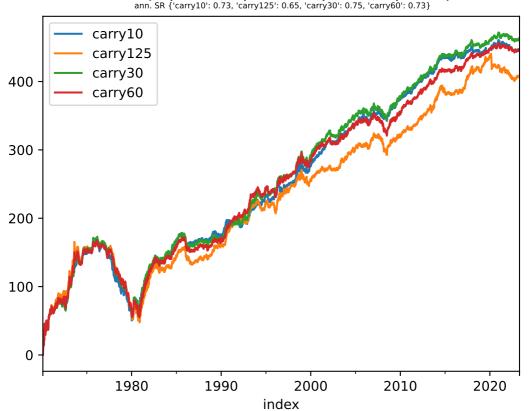
ann. mean {'carry10': -2.405, 'carry125': -4.739, 'carry30': -0.895, 'carry60': -1.428} ann. std {'carry10': 6.551, 'carry125': 7.991, 'carry30': 6.48, 'carry60': 6.464} ann. SR {'carry10': -0.37, 'carry125': -0.59, 'carry30': -0.14, 'carry60': -0.22}



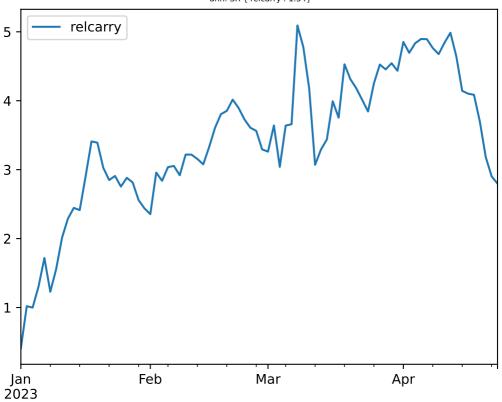
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 2.975, 'carry125': 4.376, 'carry30': 4.006, 'carry60': 4.296} ann. std {'carry10': 6.367, 'carry125': 8.958, 'carry30': 6.457, 'carry60': 6.409} ann. SR {'carry10': 0.47, 'carry125': 0.49, 'carry30': 0.62, 'carry60': 0.67}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.204, 'carry125': 7.499, 'carry30': 8.493, 'carry60': 8.205}
ann. std {'carry10': 11.201, 'carry125': 11.558, 'carry30': 11.258, 'carry60': 11.261}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}

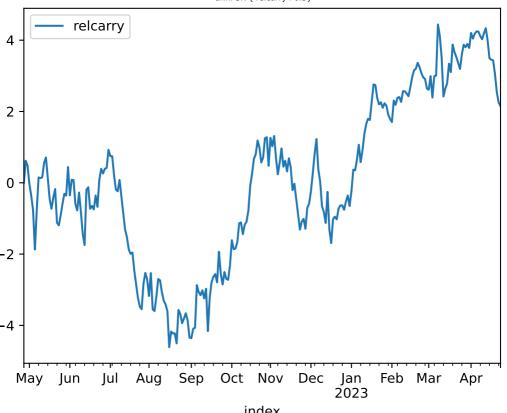


Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': 8.734} ann. std {'relcarry': 5.687} ann. SR {'relcarry': 1.54}

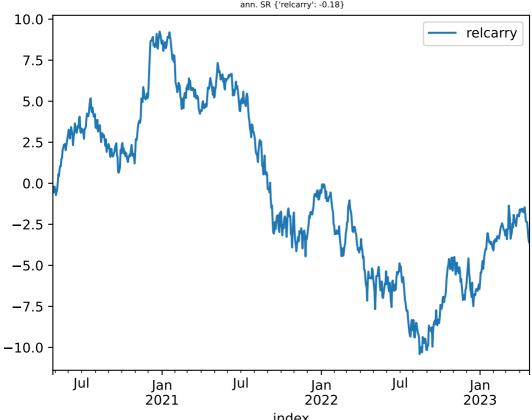


index

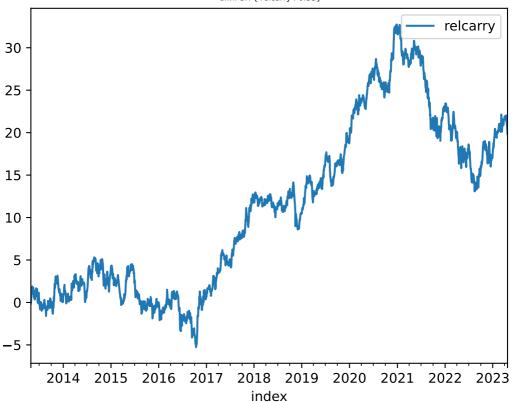
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': 2.114} ann. std {'relcarry': 6.965} ann. SR {'relcarry': 0.3}



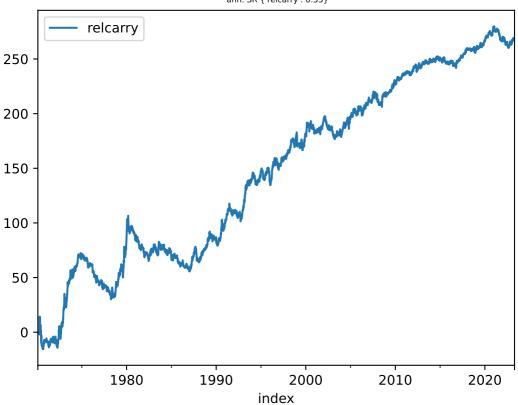
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': -1.196} ann. std {'relcarry': 6.658} ann. SR {'relcarry': -0.18}



Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 1.948} ann. std {'relcarry': 5.824} ann. SR {'relcarry': 0.33}

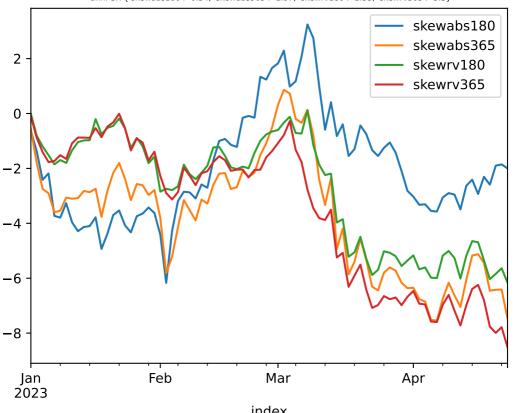


Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 4.92} ann. std {'relcarry': 8.96} ann. SR {'relcarry': 0.55}

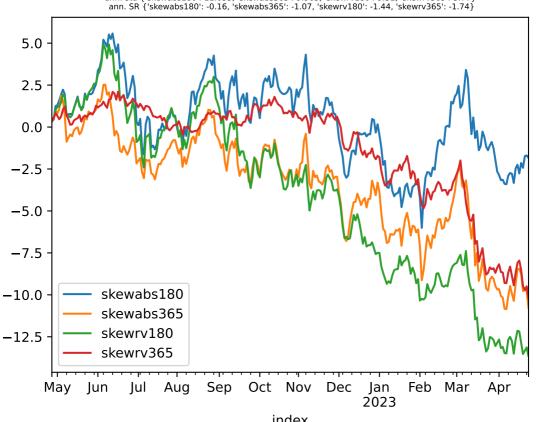


Total Trading Rule P&L for period 'YTD'

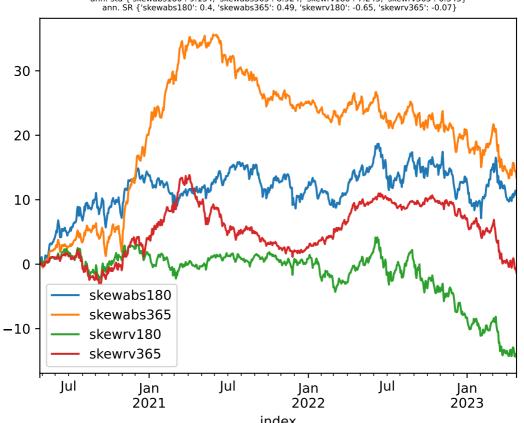
ann. mean {'skewabs180': -6.246, 'skewabs365': -23.319, 'skewrv180': -19.23, 'skewrv365': -26.572} ann. std {'skewabs180': 11.493, 'skewabs365': 11.824, 'skewrv180': 8.258, 'skewrv365': 8.053} ann. SR {'skewabs180': -0.54, 'skewabs365': -1.97, 'skewrv180': -2.33, 'skewrv365': -3.3}



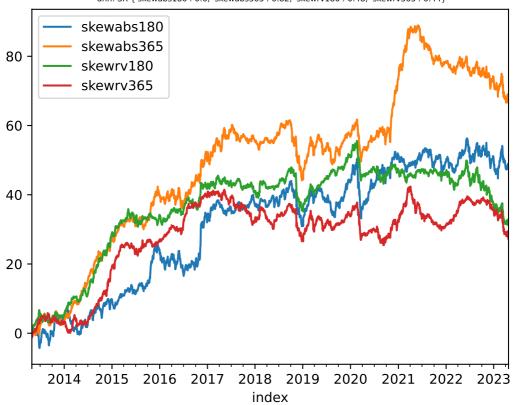
Total Trading Rule P&L for period '1Y' ann. mean {'skewabs180': -1.809, 'skewabs365': -10.617, 'skewrv180': -13.445, 'skewrv365': -10.066} ann. std {'skewabs180': 11.055, 'skewabs365': 9.965, 'skewrv180': 9.31, 'skewrv365': 5.77}



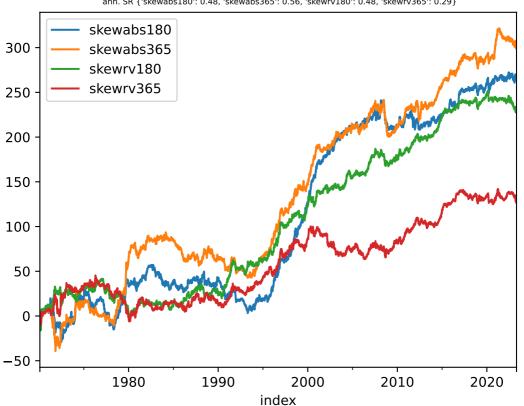
Total Trading Rule P&L for period '3Y' ann. mean {'skewabs180': 3.696, 'skewabs365': 4.382, 'skewrv180': -4.721, 'skewrv365': -0.439} ann. std {'skewabs180': 9.134, 'skewabs365': 8.924, 'skewrv180': 7.245, 'skewrv365': 6.345}



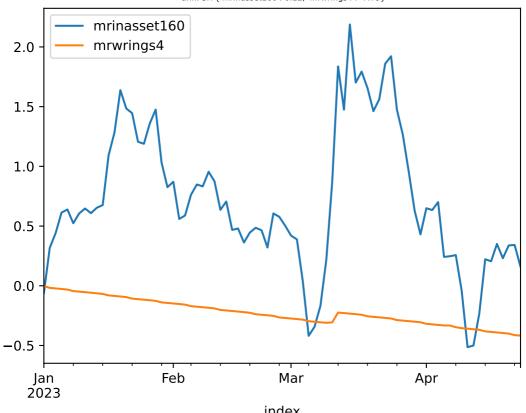
Total Trading Rule P&L for period '10Y' ann. mean {'skewabs180': 4.8, 'skewabs365': 6.545, 'skewrv180': 3.073, 'skewrv365': 2.671} ann. std {'skewabs180': 8.012, 'skewabs365': 7.959, 'skewrv180': 6.396, 'skewrv365': 6.056} ann. SR {'skewabs180': 0.6, 'skewabs365': 0.82, 'skewrv180': 0.48, 'skewrv365': 0.44}



Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.884, 'skewabs365': 5.516, 'skewrv180': 4.195, 'skewrv365': 2.335}
ann. std {'skewabs180': 10.101, 'skewabs365': 9.7, 'skewrv180': 8.751, 'skewrv365': 8.125}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



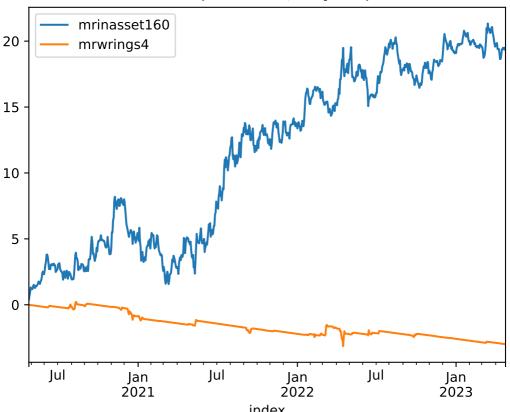
Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': 0.499, 'mrwrings4': -1.302} ann. std {'mrinasset160': 4.237, 'mrwrings4': 0.167} ann. SR {'mrinasset160': 0.12, 'mrwrings4': -7.79}



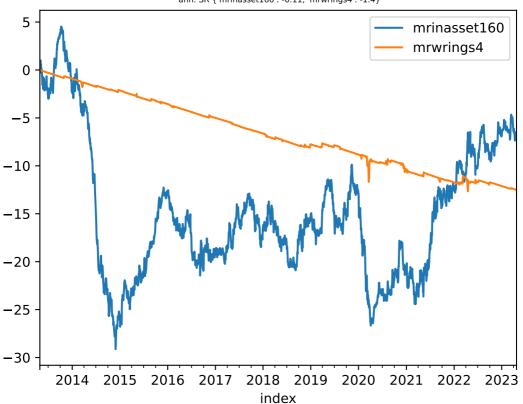
Total Trading Rule P&L for period '1Y' ann. mean {'mrinasset160': 1.17, 'mrwrings4': -0.782} ann. std {'mrinasset160': 5.198, 'mrwrings4': 0.585} ann. SR {'mrinasset160': 0.23, 'mrwrings4': -1.34}



Total Trading Rule P&L for period '3Y' ann. mean ('mrinasset160': 6.322, 'mrwrings4': -0.98) ann. std {'mrinasset160': 6.263, 'mrwrings4': 1.017) ann. SR {'mrinasset160': 1.01, 'mrwrings4': -0.96}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.657, 'mrwrings4': -1.229} ann. std {'mrinasset160': 6.214, 'mrwrings4': 0.879} ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.4}



Total Trading Rule P&L for period '99Y' ann. mean {'mrinasset160': -3.56, 'mrwrings4': -2.143} ann. std {'mrinasset160': 9.868, 'mrwrings4': 2.088} ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

