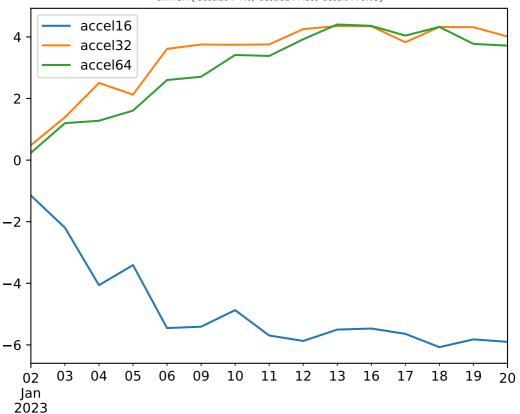
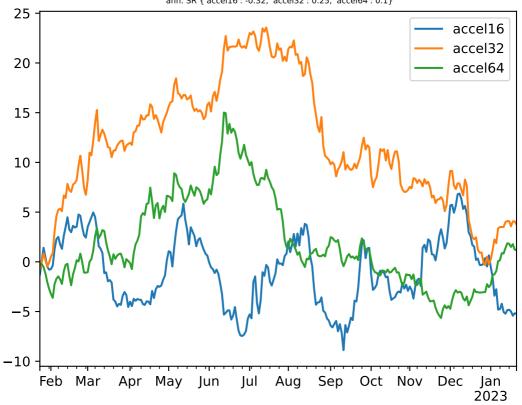
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': -100.705, 'accel32': 68.495, 'accel64': 63.443} ann. std {'accel16': 13.257, 'accel32': 9.029, 'accel64': 7.011} ann. SR {'accel16': -7.6, 'accel32': 7.59, 'accel64': 9.05}

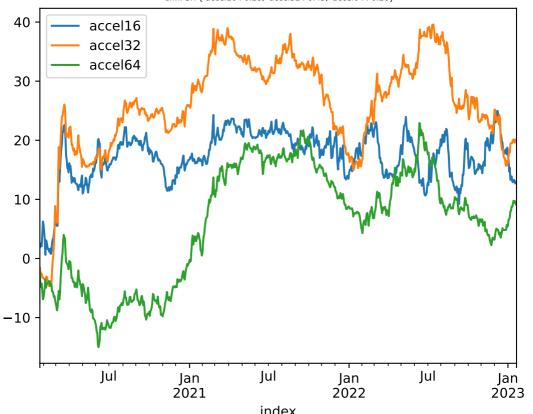


Total Trading Rule P&L for period '1Y' ann. mean {'iaccel16': -5.168, 'accel32': 3.705, 'accel64': 1.157} ann. std {'accel16': 16.17, 'accel32': 14.671, 'accel64': 11.728} ann. SR {'accel16': -0.32, 'accel32': 0.25, 'accel64': 0.1}

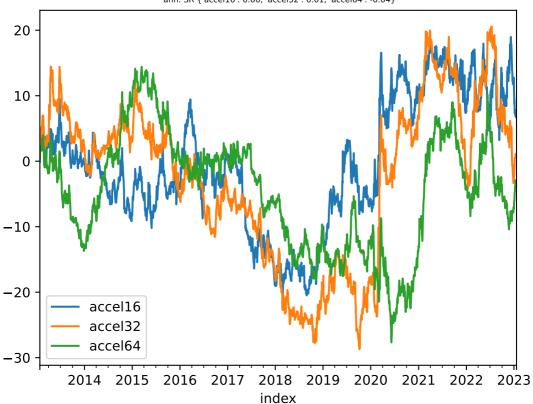


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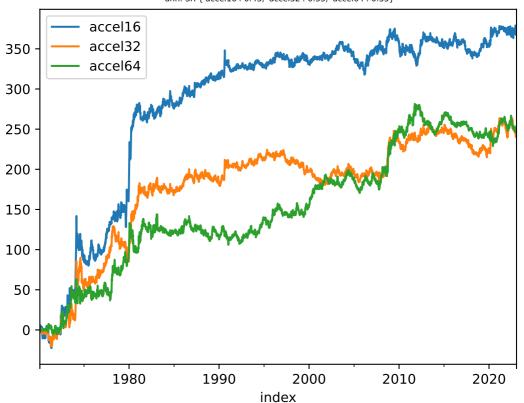
Total Trading Rule P&L for period '3Y' ann. mean {'accel16': 4.217, 'accel32': 6.486, 'accel64': 2.975} ann. std {'accel16': 15.049, 'accel32': 14.309, 'accel64': 11.612} ann. SR {'accel16': 0.28, 'accel32': 0.45, 'accel64': 0.26}

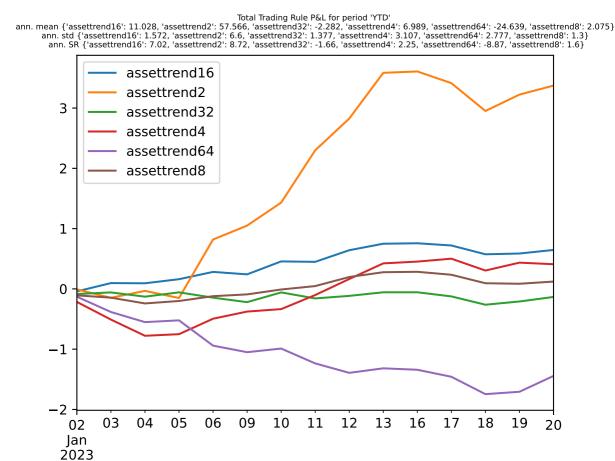


Total Trading Rule P&L for period '10Y'
ann. mean {'iaccel16': 0.673, 'accel32': 0.076, 'accel64': -0.354}
ann. Std {'accel16': 11.961, 'accel32': 11.227, 'accel64': 9.591}
ann. SR {'accel16': 0.06, 'accel32': 0.01, 'accel64': -0.04}



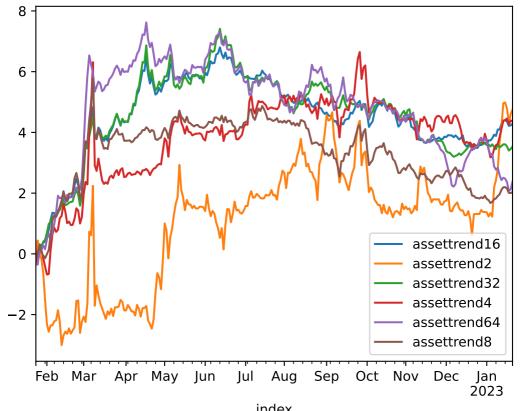
Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.799, 'accel32': 4.528, 'accel64': 4.687} ann. std {'accel16': 15.728, 'accel32': 13.798, 'accel64': 13.323} ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}





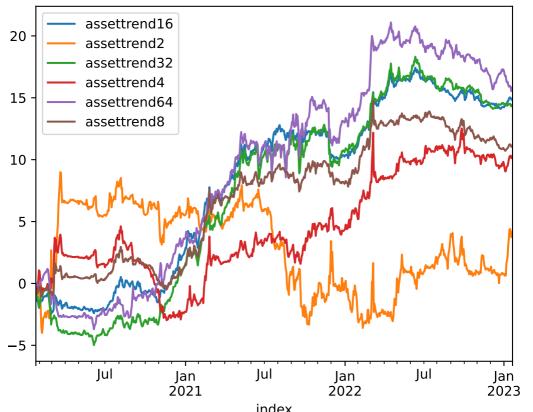
Total Trading Rule P&L for period '1Y'

ann. mean { 'assettrend16': 4.222, 'assettrend2': 4.678, 'assettrend32': 3.477, 'assettrend4': 4.298, 'assettrend64': 2.343, 'assettrend8': 2.006} ann. std { 'assettrend16': 2.986, 'assettrend2': 7.711, 'assettrend32': 3.244, 'assettrend4': 5.653, 'assettrend64': 3.87, 'assettrend8': 3.651} ann. SR { 'assettrend16': 1.41, 'assettrend2': 0.61, 'assettrend32': 1.07, 'assettrend4': 0.76, 'assettrend64': 0.61, 'assettrend8': 0.55}



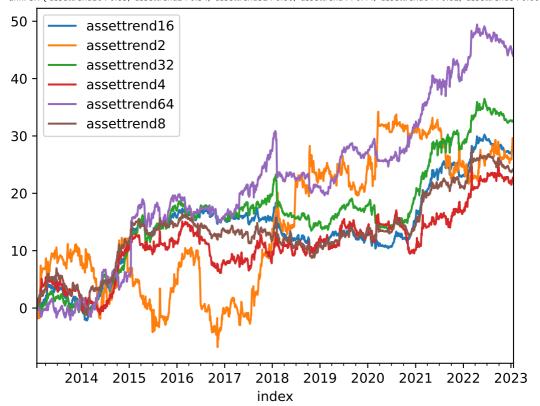
Total Trading Rule P&L for period '3Y'

ann. mean { 'assettrend16': 4.889, 'assettrend2': 1.363, 'assettrend32': 4.733, 'assettrend4': 3.356, 'assettrend64': 5.194, 'assettrend8': 3.63} ann. std { 'assettrend16': 3.585, 'assettrend2': 7.79, 'assettrend32': 4.413, 'assettrend4': 5.36, 'assettrend64': 5.145, 'assettrend8': 3.723} ann. SR { 'assettrend16': 1.36, 'assettrend2': 0.17, 'assettrend32': 1.07, 'assettrend4': 0.63, 'assettrend64': 1.01, 'assettrend8': 0.98}



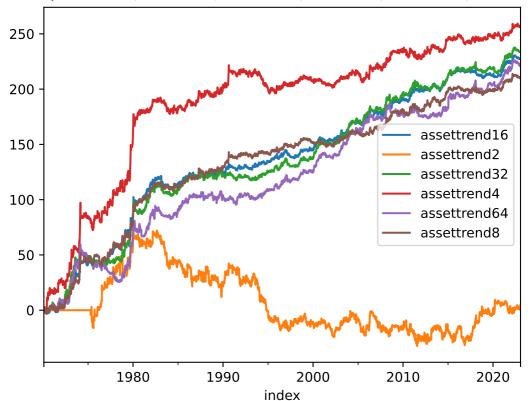
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.724, 'assettrend2': 2.887, 'assettrend32': 3.202, 'assettrend4': 2.226, 'assettrend64': 4.34, 'assettrend8': 2.358} ann. std {'assettrend16': 3.266, 'assettrend2': 8.409, 'assettrend2': 3.742, 'assettrend4': 5.001, 'assettrend64': 5.301, 'assettrend64': 5.301, 'assettrend69': 3.566} ann. SR {'assettrend16': 0.83, 'assettrend2': 0.34, 'assettrend2': 0.86, 'assettrend4': 0.44, 'assettrend64': 0.82, 'assettrend8': 0.66}



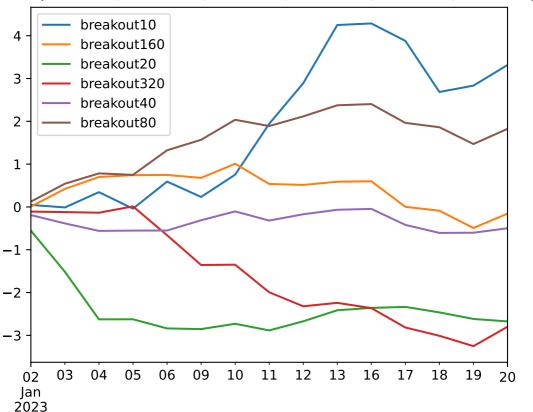
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.225, 'assettrend2': 0.085, 'assettrend32': 4.332, 'assettrend4': 4.763, 'assettrend64': 4.098, 'assettrend8': 3.892} ann. std {'assettrend16': 4.659, 'assettrend2': 10.048, 'assettrend32': 4.893, 'assettrend4': 7.347, 'assettrend64': 5.469, 'assettrend8': 5.034} ann. SR {'assettrend16': 0.91, 'assettrend2': 0.01, 'assettrend2': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}



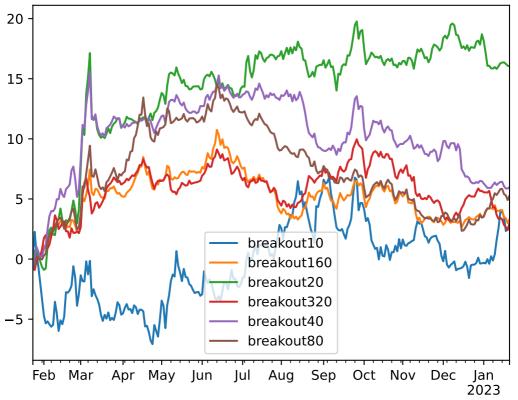
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 56.59, 'breakout160': -2.689, 'breakout20': -45.644, 'breakout320': -47.78, 'breakout40': -8.505, 'breakout80': 31.138} ann. std {'breakout10': 10.779, 'breakout160': 4.741, 'breakout20': 6.389, 'breakout30': 5.236, 'breakout40': 2.878, 'breakout80': 4.799} ann. SR {'breakout10': 5.25, 'breakout160': -0.57, 'breakout20': -7.14, 'breakout320': -9.12, 'breakout40': -2.96, 'breakout80': 6.49}



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

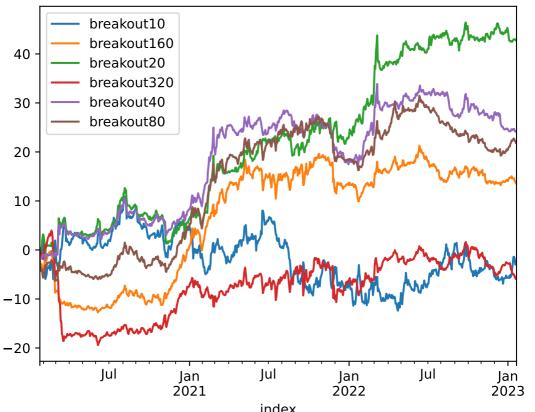
ann. mean {'breakout10': 2.916, 'breakout160': 3.274, 'breakout20': 15.779, 'breakout320': 2.821, 'breakout40': 5.885, 'breakout80': 5.183} ann. std {'breakout10': 13.187, 'breakout160': 6.947, 'breakout20': 11.802, 'breakout320': 7.218, 'breakout40': 9.504, 'breakout80': 7.93} ann. SR {'breakout10': 0.22, 'breakout160': 0.47, 'breakout20': 1.34, 'breakout320': 0.39, 'breakout40': 0.62, 'breakout80': 0.65}



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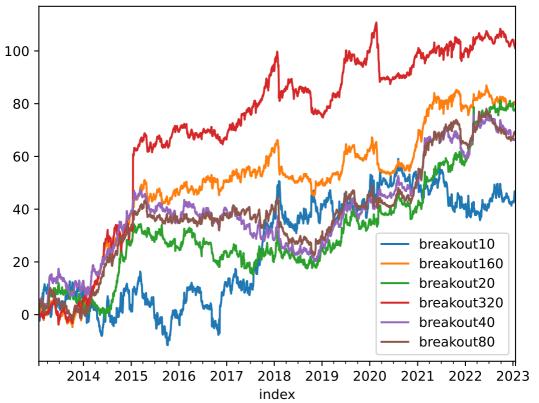
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -0.773, 'breakout160': 4.55, 'breakout20': 13.991, 'breakout320': -1.797, 'breakout40': 7.952, 'breakout80': 7.264} ann. std {'breakout10': 14.303, 'breakout160': 9.662, 'breakout20': 11.492, 'breakout320': 10.663, 'breakout40': 9.916, 'breakout80': 9.439} ann. SR {'breakout10': -0.05, 'breakout160': 0.47, 'breakout20': 1.22, 'breakout320': -0.17, 'breakout40': 0.8, 'breakout80': 0.77}



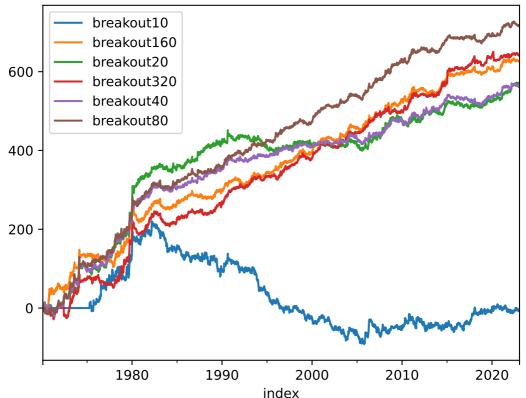
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.5, 'breakout160': 7.812, 'breakout20': 7.617, 'breakout320': 9.952, 'breakout40': 6.504, 'breakout80': 6.758} ann. std {'breakout10': 15.692, 'breakout160': 9.112, 'breakout20': 11.185, 'breakout320': 13.336, 'breakout40': 9.805, 'breakout80': 9.02} ann. SR {'breakout10': 0.29, 'breakout160': 0.86, 'breakout20': 0.68, 'breakout320': 0.75, 'breakout40': 0.66, 'breakout80': 0.75}

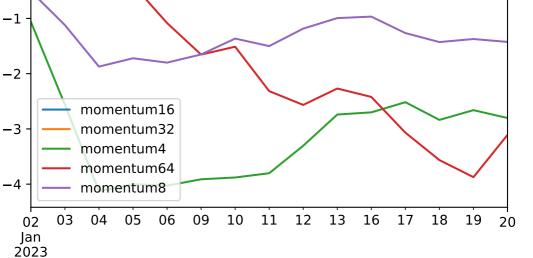


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.063, 'breakout160': 11.606, 'breakout20': 10.532, 'breakout320': 11.874, 'breakout40': 10.385, 'breakout80': 13.304} ann. std {'breakout10': 20.829, 'breakout160': 12.492, 'breakout20': 16.097, 'breakout320': 13.046, 'breakout40': 13.23, 'breakout80': 12.752} ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}

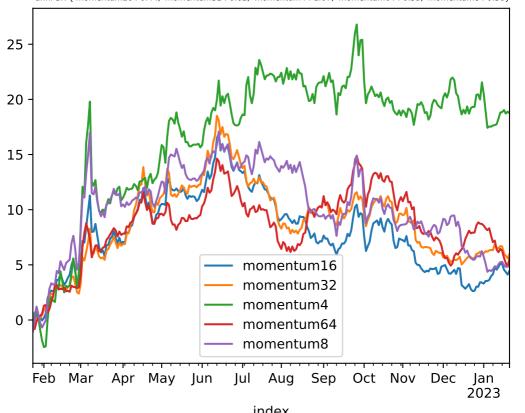


Total Trading Rule P&L for period 'YTD' ann. mean {'momentum16': 18.495, 'momentum32': -1.929, 'momentum4': -47.821, 'momentum64': -53.055, 'momentum8': -24.328} ann. std {'momentum16': 4.843, 'momentum32': 4.695, 'momentum4': 10.558, 'momentum64': 6.746, 'momentum8': 5.189} ann. SR {'momentum16': 3.82, 'momentum32': -0.41, 'momentum4': -4.53, 'momentum64': -7.86, 'momentum8': -4.69} 1 0 -2momentum16 momentum32 -3



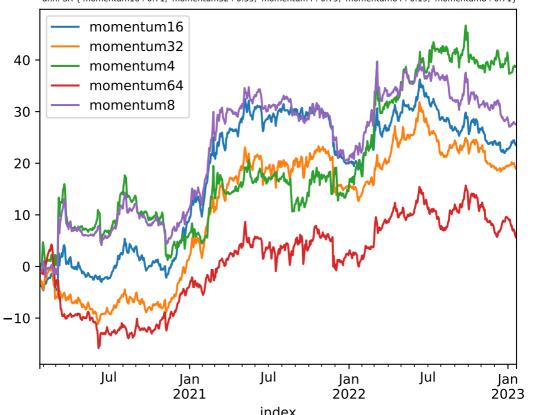
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 4.402, 'momentum32': 5.908, 'momentum4': 18.458, 'momentum64': 5.514, 'momentum8': 4.741} ann. std {'momentum16': 10.072, 'momentum32': 9.559, 'momentum4': 17.172, 'momentum64': 9.291, 'momentum8': 13.015} ann. SR {'momentum16': 0.44, 'momentum32': 0.62, 'momentum4': 1.07, 'momentum64': 0.59, 'momentum8': 0.36}



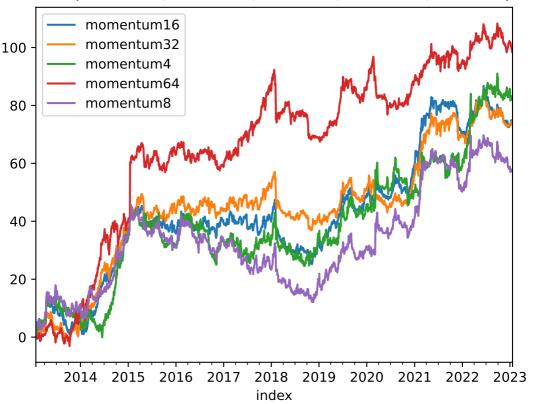
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.813, 'momentum32': 6.34, 'momentum4': 12.668, 'momentum64': 2.095, 'momentum8': 9.02} ann. std {'momentum16': 10.942, 'momentum32': 10.788, 'momentum4': 16.102, 'momentum64': 10.896, 'momentum8: 12.758} ann. SR {'momentum16': 0.71, 'momentum32': 0.59, 'momentum4': 0.79, 'momentum64': 0.19, 'momentum8': 0.71}



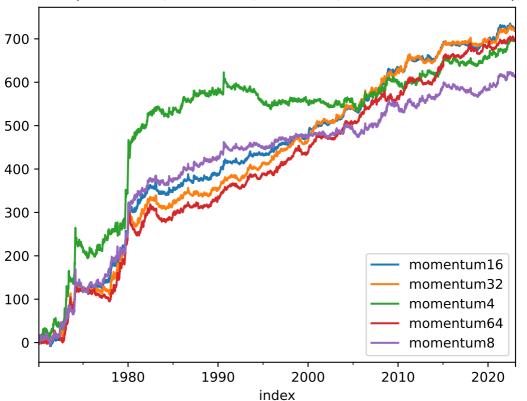
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.298, 'momentum32': 7.217, 'momentum4': 8.149, 'momentum64': 9.723, 'momentum8': 5.642} ann. std {'momentum16': 9.947, 'momentum32': 9.49, 'momentum4': 13.701, 'momentum64': 12.011, 'momentum8': 11.306} ann. SR {'momentum16': 0.73, 'momentum32': 0.76, 'momentum4': 0.59, 'momentum64': 0.81, 'momentum8': 0.5}



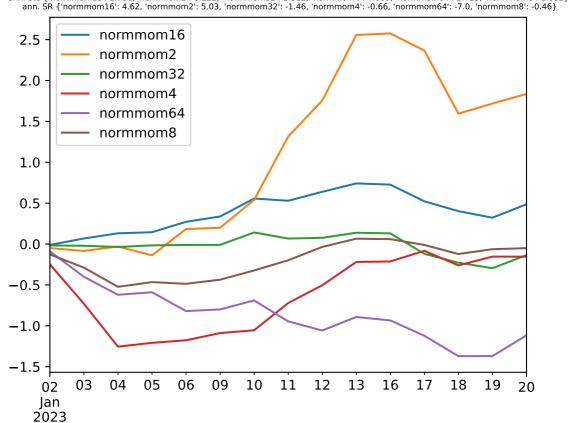
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.395, 'momentum32': 13.323, 'momentum4': 12.886, 'momentum64': 12.902, 'momentum8': 11.332} ann. std {'momentum16': 14.219, 'momentum32': 13.849, 'momentum4': 20.073, 'momentum64': 13.487, 'momentum8': 15.868} ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71



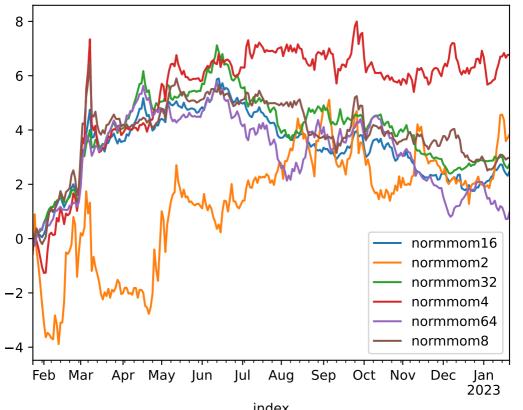


ann. mean {'normmom16': 8.299, 'normmom2': 31.328, 'normmom32': -2.315, 'normmom4': -2.635, 'normmom64': -19.054, 'normmom8': -0.858} ann. std {'normmom16': 1.796, 'normmom2': 6.222, 'normmom32': 1.582, 'normmom4': 4.009, 'normmom64': 2.723, 'normmom8': 1.861}



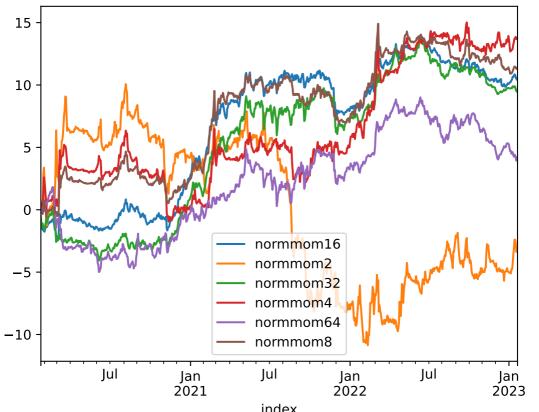
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.439, 'normmom2': 3.772, 'normmom32': 2.704, 'normmom4': 6.663, 'normmom64': 0.958, 'normmom8': 2.931} ann. std {'normmom16': 3.112, 'normmom2': 7.977, 'normmom32': 3.083, 'normmom4': 5.954, 'normmom64': 3.404, 'normmom8': 4.18} ann. SR {'normmom16': 0.78, 'normmom2': 0.47, 'normmom32': 0.88, 'normmom4': 1.12, 'normmom64': 0.28, 'normmom8': 0.7}



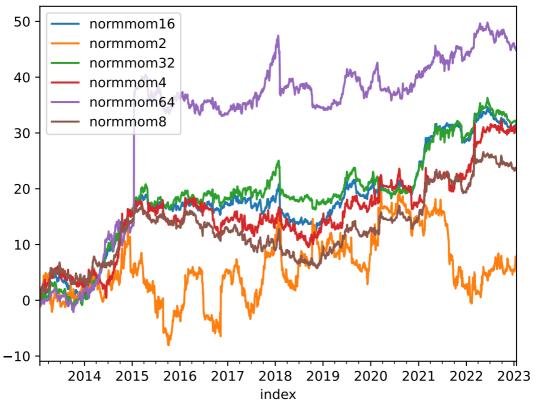
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.471, 'normmom2': -1.028, 'normmom32': 3.154, 'normmom4': 4.518, 'normmom64': 1.376, 'normmom8': 3.726} ann. std {'normmom16': 3.671, 'normmom2': 8.452, 'normmom32': 4.018, 'normmom4': 5.839, 'normmom64': 4.301, 'normmom8': 4.233} ann. SR {'normmom16': 0.95, 'normmom2': -0.12, 'normmom32': 0.78, 'normmom4': 0.77, 'normmom64': 0.32, 'normmom8': 0.88}



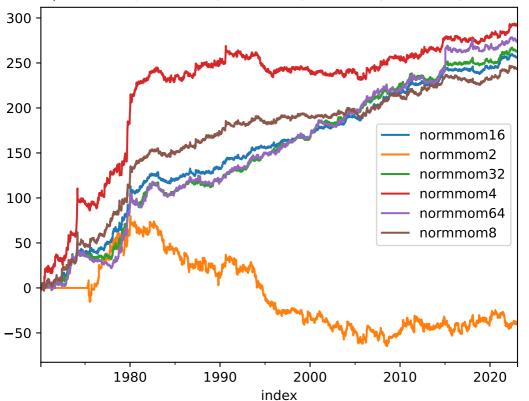
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.067, 'normmom2': 0.7, 'normmom32': 3.137, 'normmom4': 3.05, 'normmom64': 4.419, 'normmom8': 2.326} ann. std {'normmom16': 3.576, 'normmom2': 9.058, 'normmom32': 3.726, 'normmom4': 5.499, 'normmom64': 8.562, 'normmom8': 4.042} ann. SR {'normmom16': 0.86, 'normmom2': 0.08, 'normmom32': 0.84, 'normmom4': 0.55, 'normmom64': 0.52, 'normmom8': 0.58}



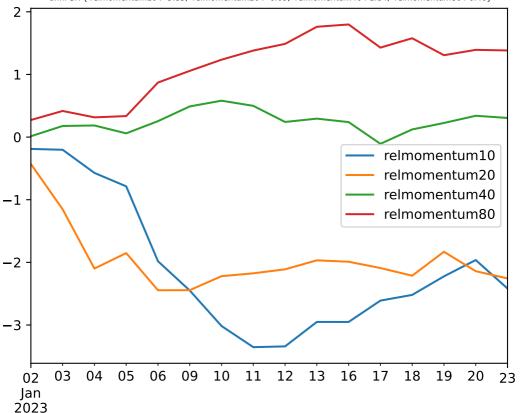
Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4,754, 'normmom2': -0.7, 'normmom32': 4,87, 'normmom4': 5,422, 'normmom64': 5,071, 'normmom8': 4,511} ann. std {'normmom16': 4,922, 'normmom2': 11.197, 'normmom32': 4,99, 'normmom4': 8,321, 'normmom64': 6,309, 'normmom8': 5,93} ann. SR {'normmom16': 0,97, 'normmom2': -0.06, 'normmom32': 0,98, 'normmom4': 0,65, 'normmom64': 0,8, 'normmom8': 0,76}



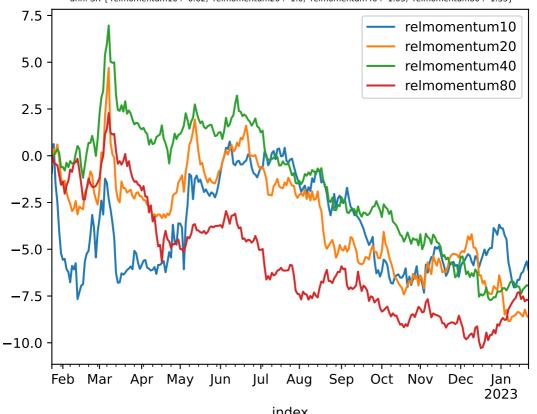
Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -38.679, 'relmomentum20': -36.102, 'relmomentum40': 4.887, 'relmomentum80': 22.127} ann. std {'relmomentum10': 6.63, 'relmomentum20': 5.924, 'relmomentum40': 2.663, 'relmomentum80': 3.427} ann. SR {'relmomentum10': -5.83, 'relmomentum20': -6.09, 'relmomentum40': 1.84, 'relmomentum80': 6.46}



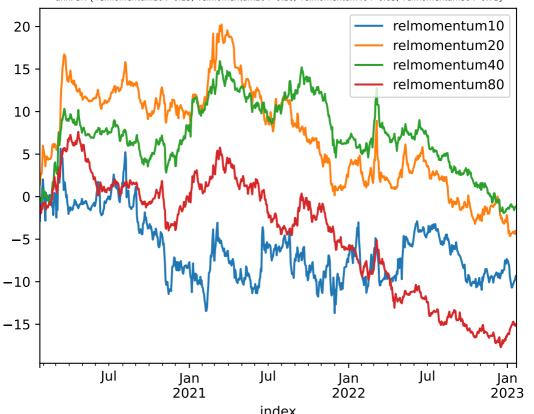
Total Trading Rule P&L for period '1Y' ann. mean {'relmomentum10': -5.985, 'relmomentum20': -8.48, 'relmomentum40': -6.823, 'relmomentum80': -7.56}

ann. mean {'relmomentum10': -5.985, 'relmomentum20': -8.48, 'relmomentum40': -6.823, 'relmomentum80': -7.56} ann. std {'relmomentum10': 9.623, 'relmomentum20': 8.488, 'relmomentum40': 6.624, 'relmomentum80': 5.693} ann. SR {'relmomentum10': -0.62, 'relmomentum20': -1.0, 'relmomentum40': -1.03, 'relmomentum80': -1.33}



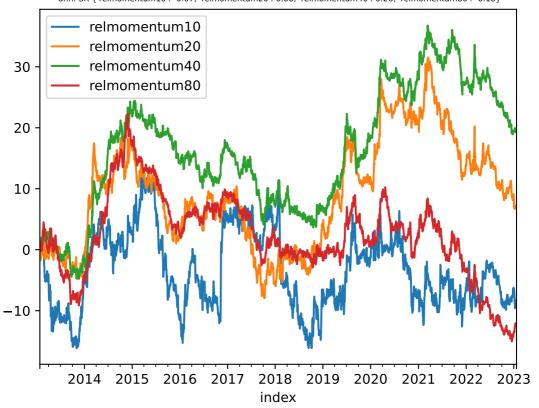
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -3.19, 'relmomentum20': -1.449, 'relmomentum40': -0.382, 'relmomentum80': -4.947} ann. std {'relmomentum10': 12.613, 'relmomentum20': 9.058, 'relmomentum40': 7.446, 'relmomentum80': 6.927} ann. SR {'relmomentum10': -0.05, 'relmomentum40': -0.05, 'relmomentum80': -0.71}



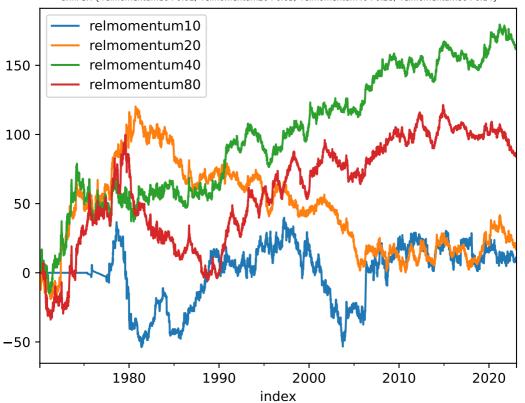
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.848, 'relmomentum20': 0.675, 'relmomentum40': 1.931, 'relmomentum80': -1.224} ann. std {'relmomentum10': 1.862, 'relmomentum20': 8.948, 'relmomentum40': 7.339, 'relmomentum80': 6.786} ann. SR {'relmomentum10': -0.07, 'relmomentum20': 0.08, 'relmomentum40': 0.26, 'relmomentum80': -0.18}

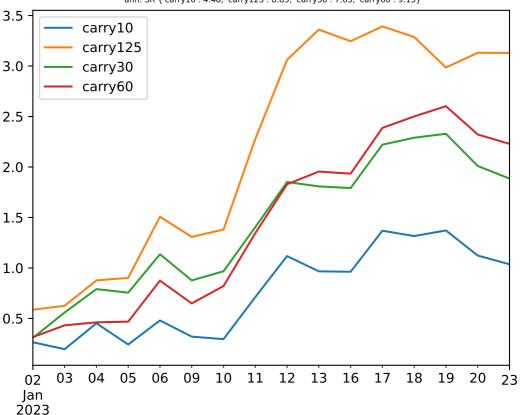


Total Trading Rule P&L for period '99Y'

ann. mean {'relmomentum10': 0.162, 'relmomentum20': 0.316, 'relmomentum40': 3.009, 'relmomentum80': 1.603} ann. std {'relmomentum10': 13.318, 'relmomentum20': 1.1.521, 'relmomentum40': 10.79, 'relmomentum80': 1.1.058} ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': 16.583, 'carry125': 50.075, 'carry30': 30.168, 'carry60': 35.669} ann. std {'carry10': 3.7, 'carry125': 5.658, 'carry30': 3.944, 'carry60': 3.897} ann. SR {'carry10': 4.48, 'carry125': 8.85, 'carry30': 7.65, 'carry60': 9.15}

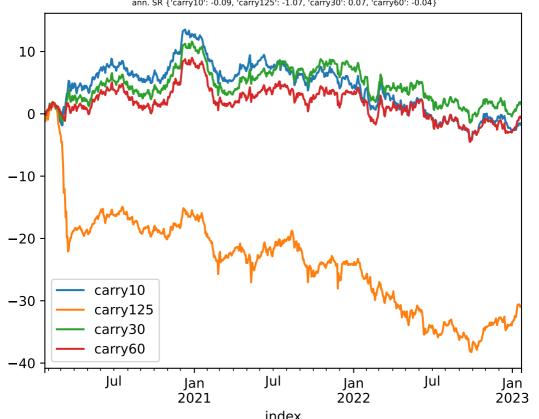


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.157, 'carry125': -4.835, 'carry30': -3.564, 'carry60': -2.623}
ann. std {'carry10': 6.866, 'carry125': 7.663, 'carry30': 6.624, 'carry60': 6.738}
ann. SR {'carry10': -0.61, 'carry125': -0.63, 'carry30': -0.54, 'carry60': -0.39}

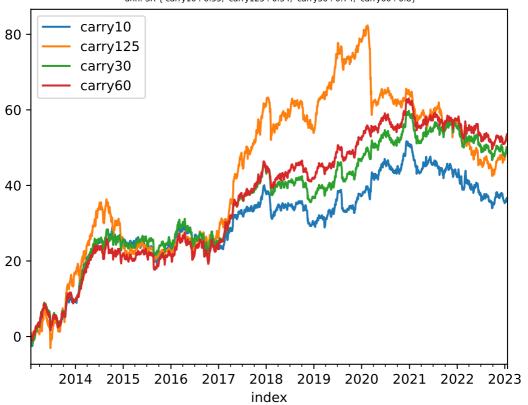


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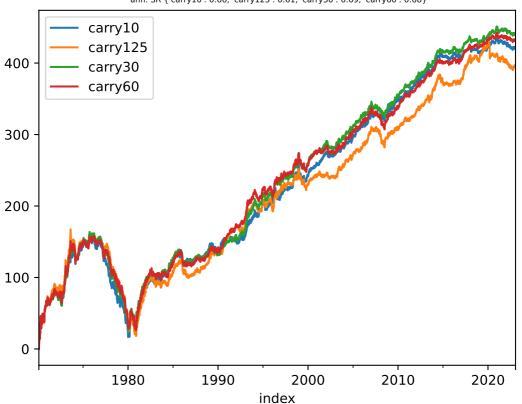
Total Trading Rule P&L for period '3Y' ann. mean {'carry10': -6.602, 'carry125': -10.094, 'carry30': 0.477, 'carry60': -0.258} ann. std {'carry10': 6.832, 'carry125': 9.45, 'carry30': 6.633, 'carry60': 6.566} ann. SR {'carry10': -0.09, 'carry125': -1.07, 'carry30': 0.07, 'carry60': -0.04}



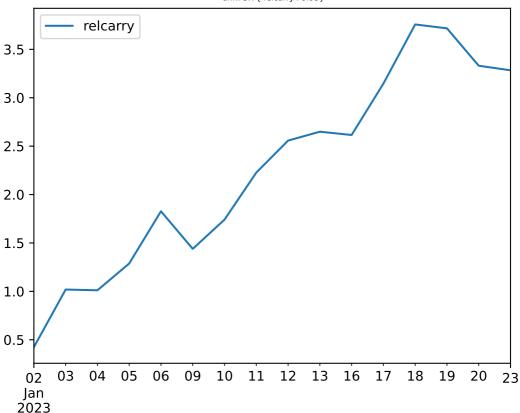
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 3.567, 'carry125': 4.9, 'carry30': 4.868, 'carry60': 5.227} ann. std {'carry10': 6.442, 'carry125': 9.133, 'carry30': 6.542, 'carry60': 6.506} ann. SR {'carry10': 0.55, 'carry125': 0.54, 'carry30': 0.74, 'carry60': 0.8}



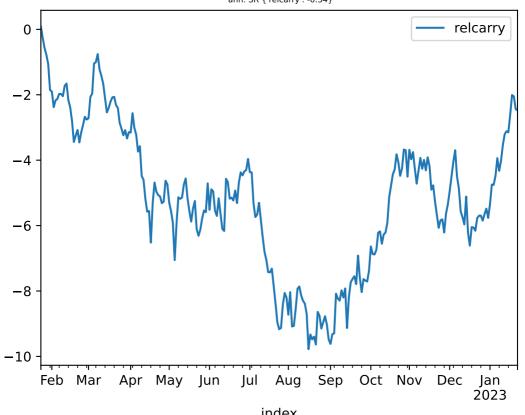
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.796, 'carry125': 7.368, 'carry30': 8.171, 'carry60': 8.021}
ann. std {'carry10': 11.853, 'carry125': 12.095, 'carry30': 11.865, 'carry60': 11.816}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



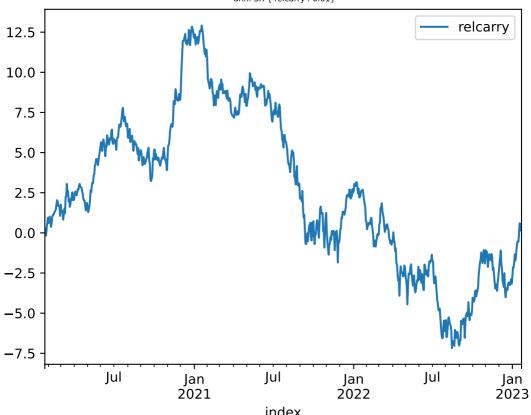
Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': 52.539} ann. std {'relcarry': 5.278} ann. SR {'relcarry': 9.95}



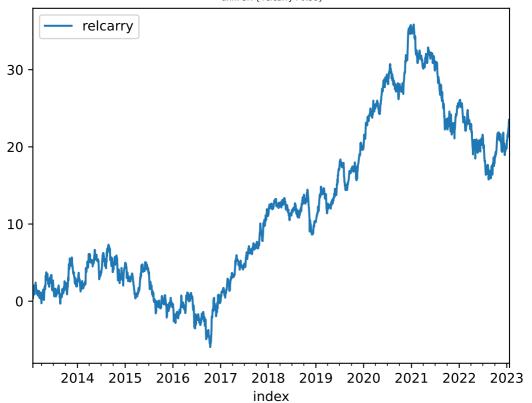
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': -2.433} ann. std {'relcarry': 7.256} ann. SR {'relcarry': -0.34}



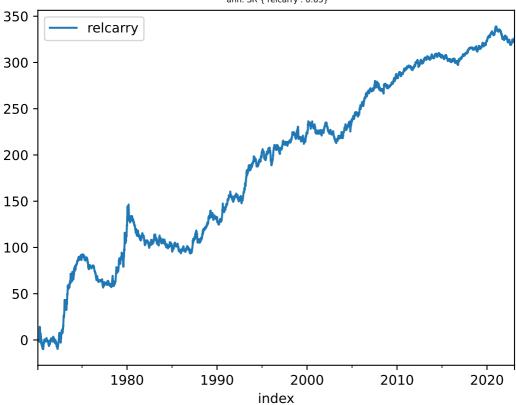
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': 0.039} ann. std {'relcarry': 6.85} ann. SR {'relcarry': 0.01}



Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 2.264} ann. std {'relcarry': 6.032} ann. SR {'relcarry': 0.38}

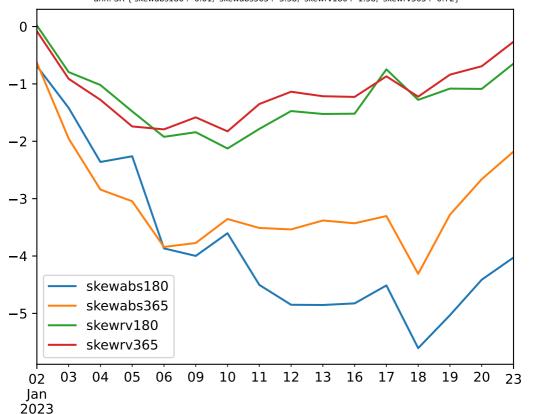


Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 6.041} ann. std {'relcarry': 9.555} ann. SR {'relcarry': 0.63}



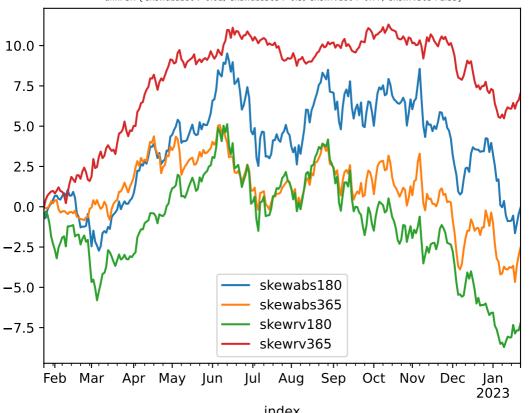
Total Trading Rule P&L for period 'YTD' ann. mean {'skewabs180': -64.425, 'skewabs365': -34.881, 'skewrv180': -10.344, 'skewrv365': -4.246}

ann. std {'skewabs180': 10.719, 'skewabs365': 10.332, 'skewrv180': 6.546, 'skewrv365': 5.888} ann. SR {'skewabs180': -6.01, 'skewabs365': -3.38, 'skewrv180': -1.58, 'skewrv365': -0.72}



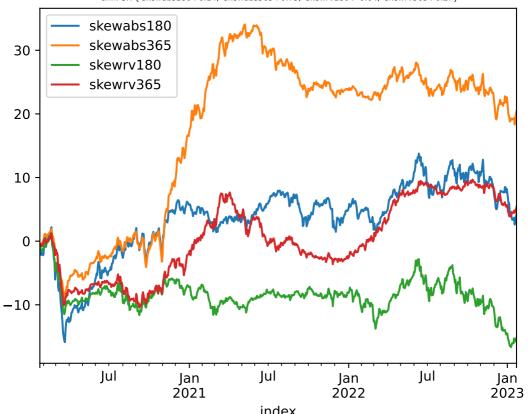
Total Trading Rule P&L for period '1Y' ann. mean {'skewabs180': -0.062, 'skewabs365': -2.492, 'skewrv180': -7.094, 'skewrv365': 6.908}

ann. mean { 'skewabs180': -0.062, 'skewabs365': -2.492, 'skewrv180': -7.094, 'skewrv365': 6.908} ann. std { 'skewabs180': 10.123, 'skewabs365': 8.262, 'skewrv180': 9.234, 'skewrv365': 5.102} ann. SR { 'skewabs180': -0.01, 'skewabs365': -0.3, 'skewrv180': -0.77, 'skewrv365': 1.35}

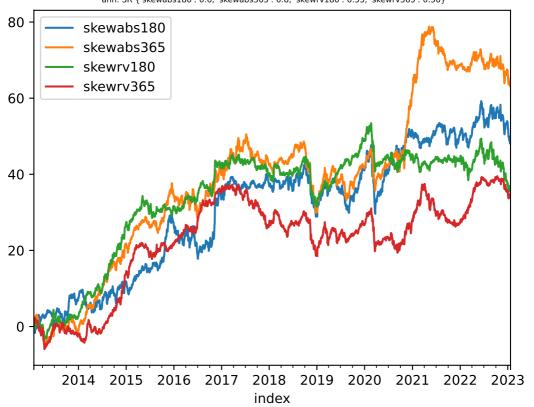


Total Trading Rule P&L for period '3Y'

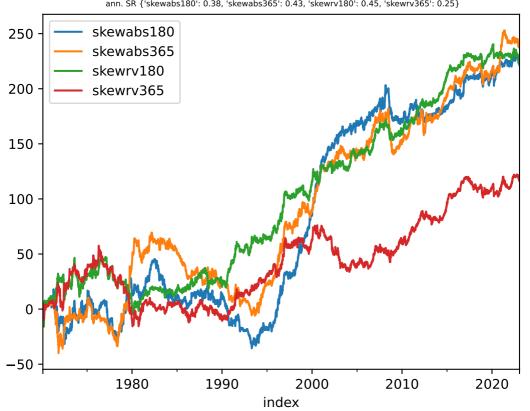
ann. mean {'skewabs180': 1.37, 'skewabs365': 6.699, 'skewrv180': -4.968, 'skewrv365': 1.77} ann. std ('skewabs180': 9.679, 'skewabs365': 8.895, 'skewrv180': 7.796, 'skewrv365': 6.616} ann. SR {'skewabs180': 0.14, 'skewabs365': 0.75, 'skewrv180': -0.64, 'skewrv365': 0.27}



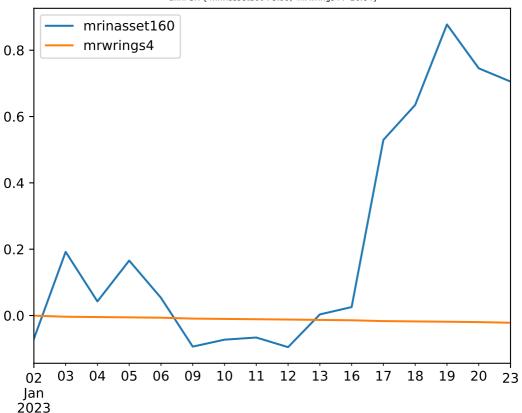
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.875, 'skewabs365': 6.405, 'skewrv180': 3.633, 'skewrv365': 3.459}
ann. std {'skewabs180': 8.064, 'skewabs365': 8.012, 'skewrv180': 6.579, 'skewrv365': 6.179}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.8, 'skewrv180': 0.55, 'skewrv365': 0.56}



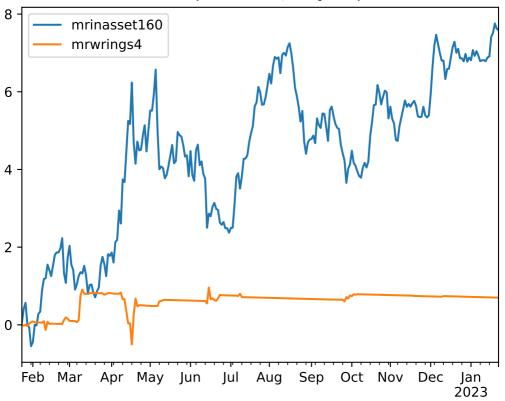
Total Trading Rule P&L for period '99Y' ann. mean {'skewabs180': 4.125, 'skewabs365': 4.433, 'skewrv180': 4.15, 'skewrv365': 2.185} ann. std {'skewabs180': 10.792, 'skewabs365': 10.298, 'skewrv180': 9.305, 'skewrv365': 8.599} ann. SR {'skewabs180': 0.38, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.25}



Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': 11.286, 'mrwrings4': -0.348} ann. std {'mrinasset160': 2.83, 'mrwrings4': 0.013} ann. SR {'mrinasset160': 3.99, 'mrwrings4': -26.84}



Total Trading Rule P&L for period '1Y' ann. mean {'mrinasset160': 7.441, 'mrwrings4': 0.686} ann. std {'mrinasset160': 5.938, 'mrwrings4': 1.479} ann. SR {'mrinasset160': 1.25, 'mrwrings4': 0.46}

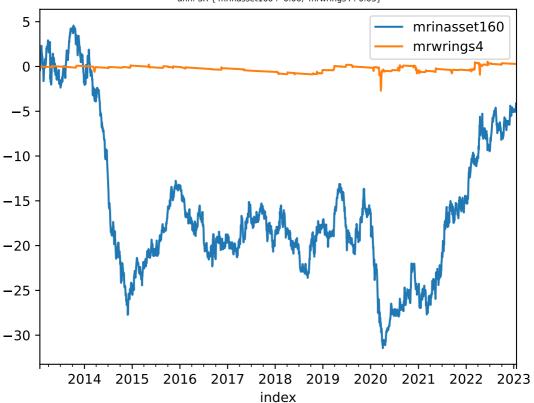


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Total Trading Rule P&L for period '3Y' ann. mean {'mrinasset160': 5.411, 'mrwrings4': 0.255} ann. std {'mrinasset160': 6.866, 'mrwrings4': 1.526} ann. SR {'mrinasset160': 0.79, 'mrwrings4': 0.17}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.418, 'mrwrings4': 0.827} ann. std {'mrinasset160': 6.594, 'mrwrings4': 0.897} ann. SR {'mrinasset160': -0.06, 'mrwrings4': 0.03}



Total Trading Rule P&L for period '99Y' ann. mean {"mrinasset160': -3.336, 'mrwrings4': -1.172} ann. std {'mrinasset160': 10.914, 'mrwrings4': 2.629} ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

