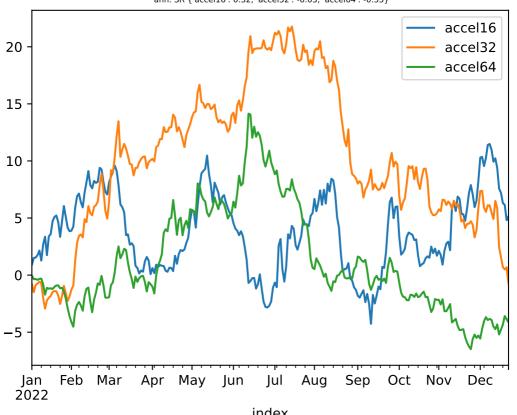
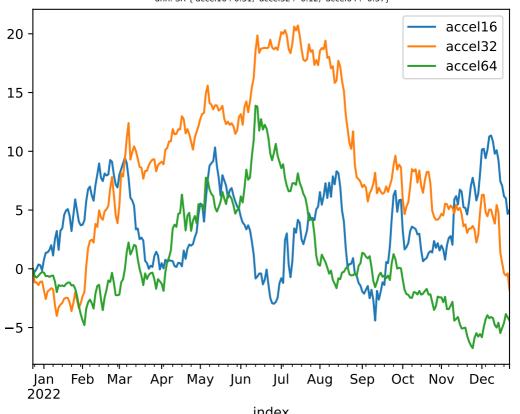
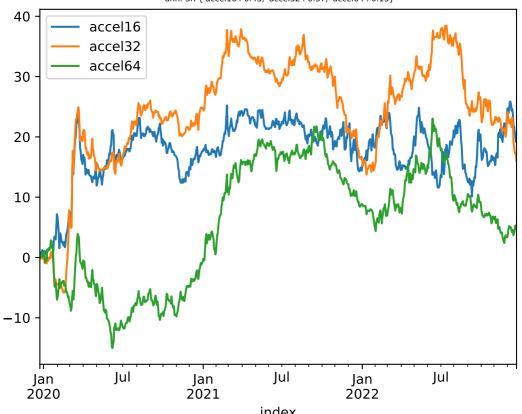
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': 5.19, 'accel32': -0.733, 'accel64': -4.17} ann. std {'accel16': 16.273, 'accel32': 14.762, 'accel64': 11.75} ann. SR {'accel16': 0.32, 'accel32': -0.05, 'accel64': -0.35}



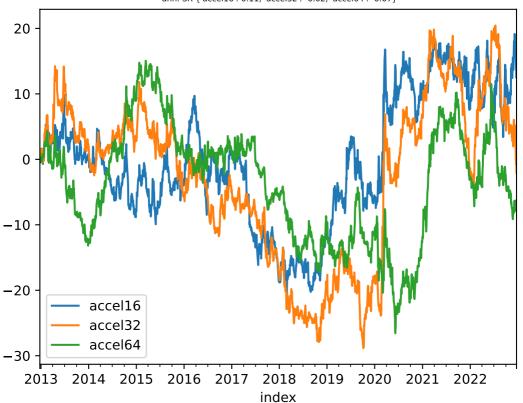
Total Trading Rule P&L for period '1Y' ann. mean {'accel16': 4.932, 'accel32': -1.771, 'accel64': -4.336} ann. std {'accel16': 16.098, 'accel32': 14.641, 'accel64': 11.636} ann. SR {'accel16': 0.31, 'accel32': -0.12, 'accel64': -0.37}



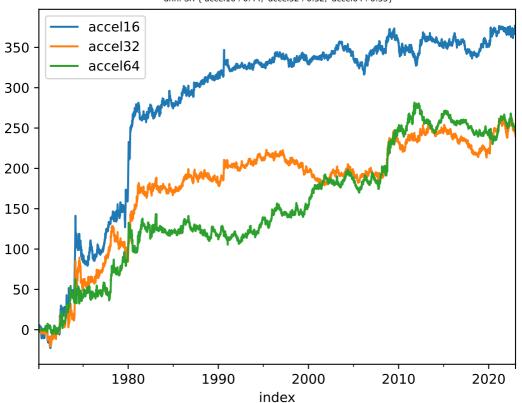
Total Trading Rule P&L for period '3Y' ann. mean {'accel16': 6.388, 'accel32': 5.223, 'accel64': 1.554} ann. std {'accel16': 14.919, 'accel32': 14.266, 'accel64': 11.747} ann. SR {'accel16': 0.43, 'accel32': 0.37, 'accel64': 0.13}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.258, 'accel32': -0.202, 'accel64': -0.667}
ann. std {'accel16': 11.922, 'accel32': 11.201, 'accel64': 9.576}
ann. SR {'accel16': 0.11, 'accel32': -0.02, 'accel64': -0.07}

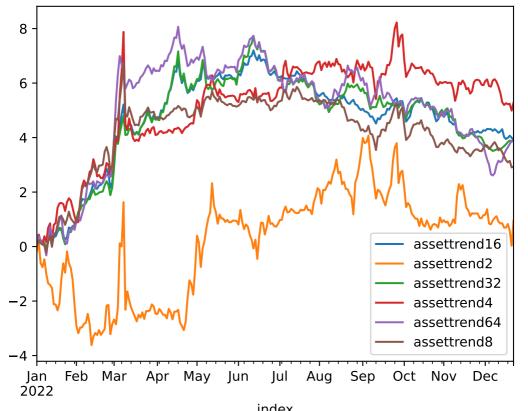


Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.88, 'accel32': 4.455, 'accel64': 4.635} ann. std {'accel16': 15.731, 'accel32': 13.803, 'accel64': 13.33} ann. SR {'accel16': 0.44, 'accel32': 0.32, 'accel64': 0.35}



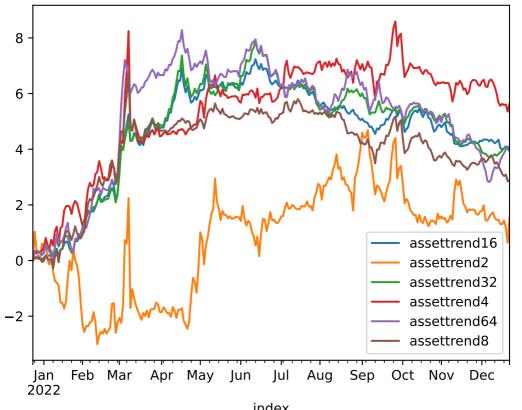
Total Trading Rule P&L for period 'YTD'

ann. mean {\assettrend16\cdot 3.924, \assettrend2\cdot 0.955, \assettrend32\cdot 3.895, \assettrend4\cdot 5.321, \assettrend64\cdot 3.907, \assettrend8\cdot 2.958\\
ann. std {\assettrend16\cdot 3.066, \assettrend2\cdot 7.816, \assettrend32\cdot 3.866, \assettrend4\cdot 5.81, \assettrend64\cdot 6.25, \assettrend8\cdot 3.804\\
ann. SR {\assettrend16\cdot 1.28, \assettrend2\cdot 0.12, \assettrend2\cdot 1.16, \assettrend4\cdot 0.92, \assettrend64\cdot 0.97, \assettrend8\cdot 0.78\\\
\end{arrange}



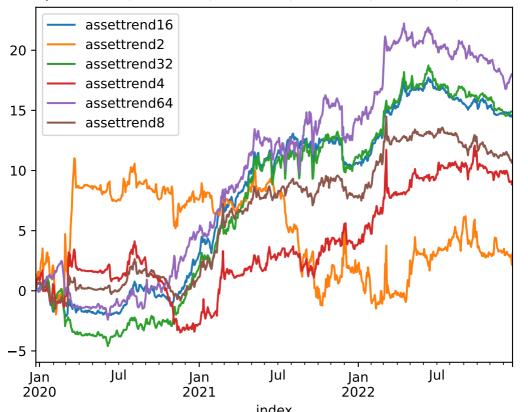
Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 3.87, 'assettrend2': 1.536, 'assettrend32': 4.002, 'assettrend4': 5.559, 'assettrend64': 4.026, 'assettrend8': 2.837} ann. std {'assettrend16': 3.035, 'assettrend2': 7.845, 'assettrend32': 3.338, 'assettrend4': 5.752, 'assettrend64': 3.988, 'assettrend8': 3.764} ann. SR {'assettrend16': 1.28, 'assettrend2': 0.2, 'assettrend32': 1.2, 'assettrend4': 0.97, 'assettrend64': 1.01, 'assettrend8': 0.75}



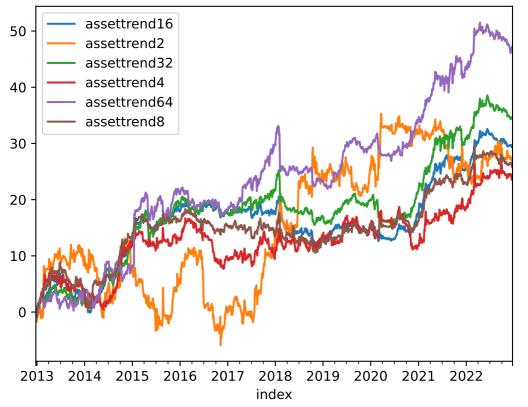
Total Trading Rule P&L for period '3Y'

ann. mean { 'assettrend16': 4.717, 'assettrend2': 1.007, 'assettrend32': 4.868, 'assettrend4': 2.983, 'assettrend64': 5.897, 'assettrend8': 3.484} ann. std { 'assettrend16': 3.609, 'assettrend2': 7.881, 'assettrend32': 4.421, 'assettrend4': 5.458, 'assettrend64': 5.129, 'assettrend8': 3.76} ann. SR ('assettrend16': 1.31, 'assettrend2': 0.13, 'assettrend32': 1.1, 'assettrend4': 0.55, 'assettrend64': 1.15, 'assettrend8': 0.93}



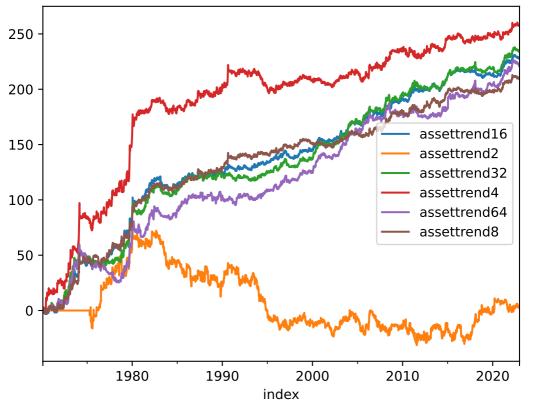
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.873, 'assettrend2': 2.684, 'assettrend32': 3.405, 'assettrend4': 2.327, 'assettrend64': 4.645, 'assettrend8': 2.524} ann. std {'assettrend16': 3.278, 'assettrend2': 8.443, 'assettrend32': 3.756, 'assettrend4': 5.033, 'assettrend64': 5.312, 'assettrend8': 3.585} ann. SR {'assettrend16': 0.88, 'assettrend2': 0.32, 'assettrend32': 0.91, 'assettrend4': 0.46, 'assettrend64': 0.87, 'assettrend8': 0.7}



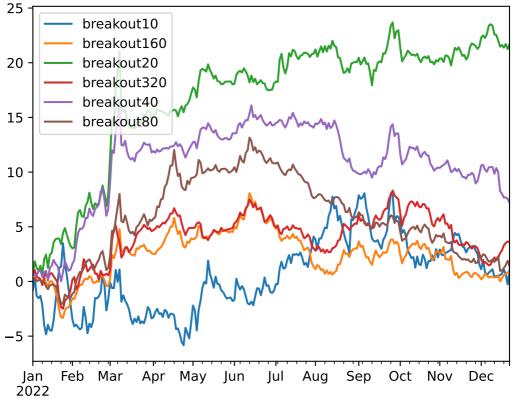
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.226, 'assettrend2': 0.056, 'assettrend32': 4.344, 'assettrend4': 4.776, 'assettrend64': 4.12, 'assettrend8': 3.88} ann. std {'assettrend16': 4.662, 'assettrend2': 10.053, 'assettrend32': 4.897, 'assettrend4': 7.352, 'assettrend64': 5.472, 'assettrend8': 5.037} ann. SR {'assettrend16': 0.91, 'assettrend2': 0.01, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}



Total Trading Rule P&L for period 'YTD'

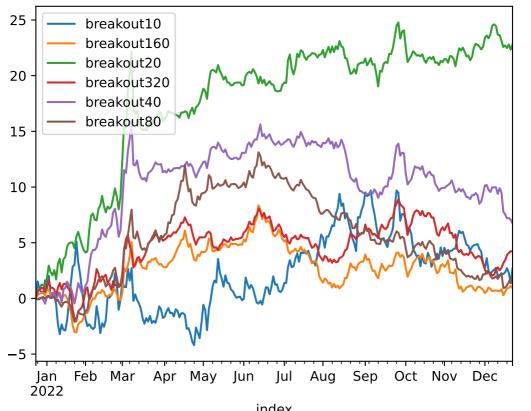
ann. mean {'breakout10': 1.084, 'breakout160': 0.665, 'breakout20': 21.866, 'breakout320': 3.645, 'breakout40': 7.267, 'breakout80': 1.397} ann. std {'breakout10': 13.811, 'breakout160': 7.168, 'breakout20': 12.141, 'breakout320': 7.5, 'breakout40': 9.802, 'breakout80': 7.997} ann. SR {'breakout10': 0.08, 'breakout160': 0.09, 'breakout20': 1.8, 'breakout320': 0.49, 'breakout40': 0.74, 'breakout80': 0.17}



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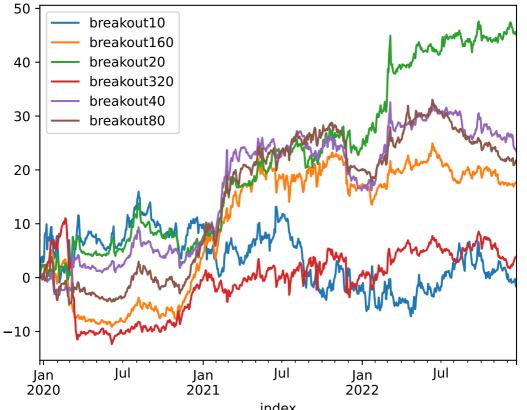
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.659, 'breakout160': 0.925, 'breakout20': 22.442, 'breakout320': 4.138, 'breakout40': 6.633, 'breakout80': 1.33} ann. std {'breakout10': 13.8, 'breakout160': 7.094, 'breakout20': 12.024, 'breakout320': 7.446, 'breakout40': 9.699, 'breakout80': 7.908} ann. SR {'breakout10': 0.19, 'breakout160': 0.13, 'breakout20': 1.87, 'breakout320': 0.56, 'breakout40': 0.68, 'breakout80': 0.17}



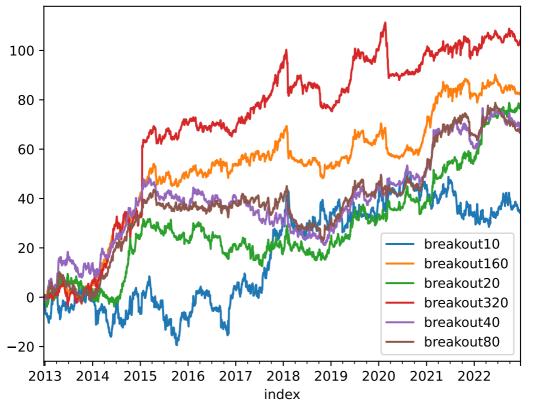
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -0.098, 'breakout160': 5.736, 'breakout20': 14.903, [']breakout320': 1.261, 'breakout40': 7.642, 'breakout80': 6.961} ann. std {'breakout10': 15.057, 'breakout160': 9.745, 'breakout20': 11.524, 'breakout320': 10.746, 'breakout40': 9.986, 'breakout80': 9.61} ann. SR {'breakout10': -0.01, 'breakout160': 0.59, 'breakout20': 1.29, 'breakout320': 0.12, 'breakout40': 0.77, 'breakout80': 0.72}



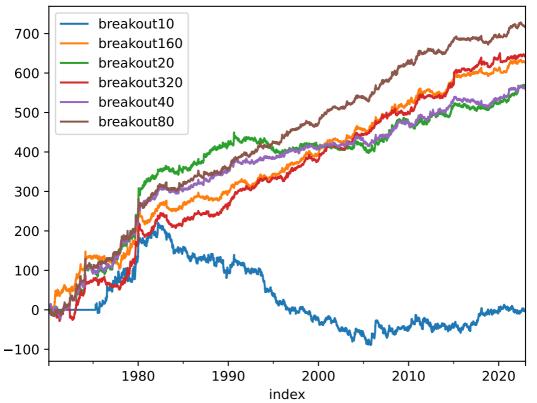
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.47, 'breakout160': 8.128, 'breakout20': 7.535, 'breakout320': 10.221, 'breakout40': 6.618, 'breakout80': 6.58} ann. std {'breakout10': 15.724, 'breakout160': 9.138, 'breakout20': 11.207, 'breakout320': 13.343, 'breakout40': 9.853, 'breakout80': 9.024} ann. SR {'breakout10': 0.22, 'breakout160': 0.89, 'breakout20': 0.67, 'breakout320': 0.77, 'breakout40': 0.67, 'breakout80': 0.73}



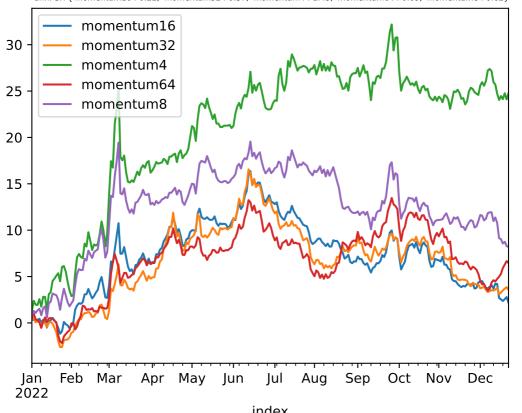
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.06, 'breakout160': 11.632, 'breakout20': 10.545, 'breakout320': 11.934, 'breakout40': 10.375, 'breakout80': 13.292} ann. std {'breakout10': 20.842, 'breakout160': 12.501, 'breakout20': 16.107, 'breakout320': 13.054, 'breakout40': 13.239, 'breakout80': 12.761} ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}



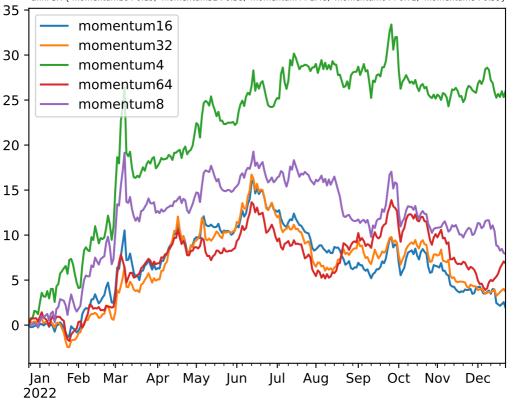
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 2.202, 'momentum32': 3.597, 'momentum4': 24.949, 'momentum64': 6.507, 'momentum8': 8.252} ann. std {'momentum16': 10.204, 'momentum32': 9.739, 'momentum4': 17.395, 'momentum64': 9.445, 'momentum8': 13.346} ann. SR {'momentum16': 0.22, 'momentum82': 0.37, 'momentum4': 1.43, 'momentum64': 0.69, 'momentum8': 0.62}



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

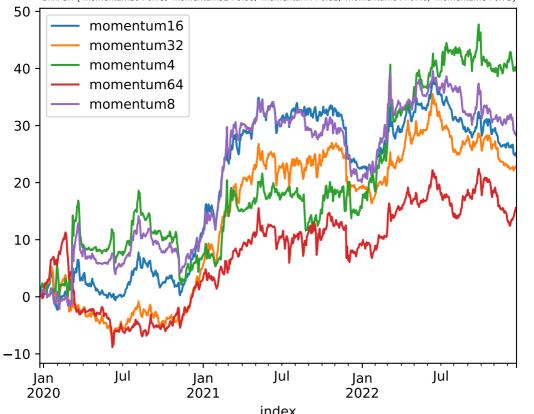
ann. mean {'momentum16': 1.924, 'momentum32': 3.677, 'momentum4': 25.569, 'momentum64': 6.764, 'momentum8': 7.781} ann. std {'momentum16': 10.09, 'momentum32': 9.632, 'momentum4': 17.226, 'momentum64': 9.358, 'momentum8': 13.2} ann. SR {'momentum16': 0.19, 'momentum32': 0.38, 'momentum4': 1.48, 'momentum64': 0.72, 'momentum18': 0.59}



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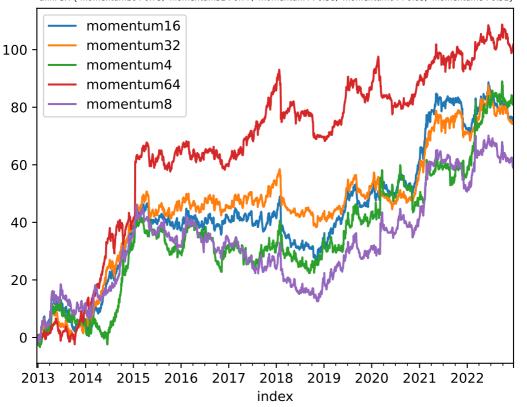
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.051, 'momentum32': 7.387, 'momentum4': 13.171, 'momentum64': 5.038, 'momentum8: 9.225} ann. std {'momentum16': 11.018, 'momentum32': 10.858, 'momentum4': 16.089, 'momentum64': 10.962, 'momentum8: 12.773} ann. SR {'momentum16': 0.73, 'momentum32': 0.68, 'momentum4': 0.82, 'momentum64': 0.46, 'momentum8': 0.72}



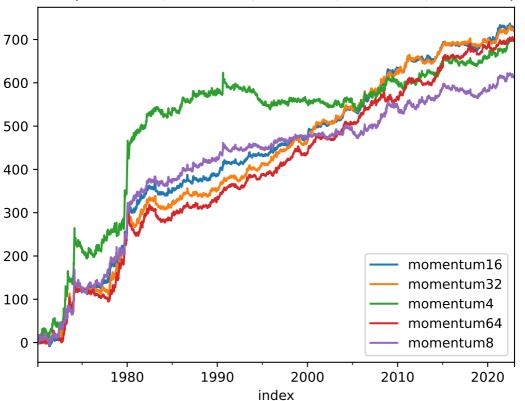
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.309, 'momentum32': 7.321, 'momentum4': 8.004, 'momentum64': 9.983, 'momentum8': 5.771} ann. std {'momentum16': 9.962, 'momentum32': 9.504, 'momentum4': 13.69, 'momentum64': 12.012, 'momentum8': 11.332} ann. SR {'momentum16': 0.73, 'momentum32': 0.77, 'momentum4': 0.58, 'momentum64': 0.83, 'momentum8': 0.51}



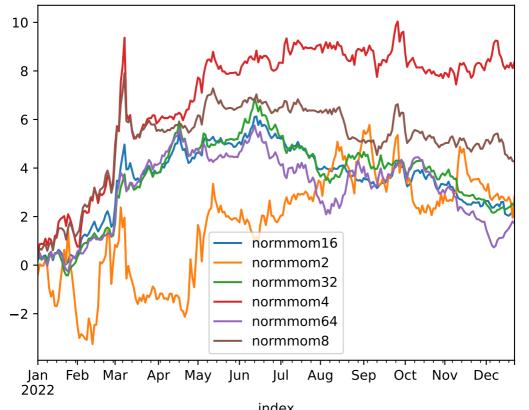
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.413, 'momentum32': 13.346, 'momentum4': 12.955, 'momentum64': 12.959, 'momentum8': 11.336} ann. std {'momentum16': 14.229, 'momentum32': 13.858, 'momentum4': 20.083, 'momentum64': 13.495, 'momentum8': 15.878} ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.65, 'momentum64': 0.96, 'momentum8': 0.71



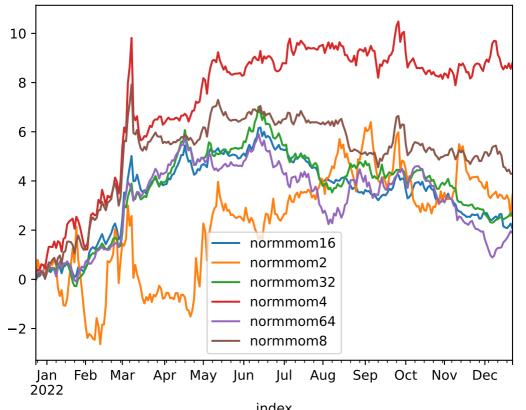
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.022, 'normmom2': 2.846, 'normmom32': 2.455, 'normmom4': 8.428, 'normmom64': 1.737, 'normmom8': 4.302} ann. std {'normmom16': 3.177, 'normmom2': 8.15, 'normmom32': 3.193, 'normmom4': 6.023, 'normmom64': 3.462, 'normmom8': 4.306} ann. SR {'normmom16': 0.64, 'normmom2': 0.35, 'normmom32': 0.77, 'normmom4': 1.4, 'normmom64': 0.5, 'normmom8': 1.0}



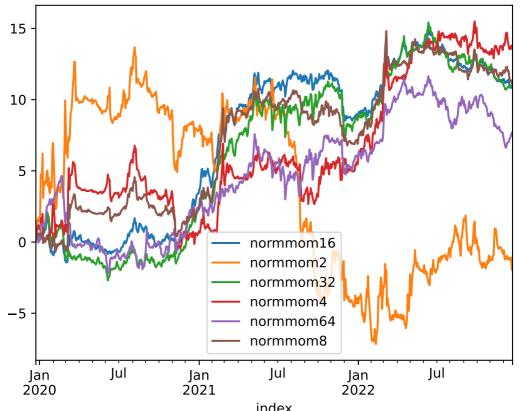
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.021, 'normmom2': 3.389, 'normmom32': 2.542, 'normmom4': 8.674, 'normmom64': 1.851, 'normmom8': 4.217} ann. std {'normmom16': 3.148, 'normmom2': 8.11, 'normmom32': 3.17, 'normmom4': 5.97, 'normmom64': 3.435, 'normmom8': 4.269} ann. SR {'normmom16': 0.64, 'normmom2': 0.42, 'normmom32': 0.8, 'normmom4': 1.45, 'normmom64': 0.54, 'normmom8': 0.99}



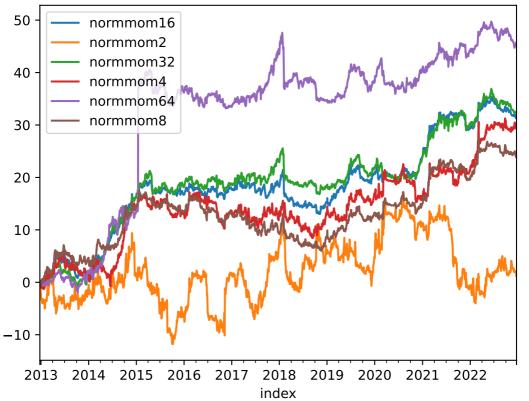
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.533, 'normmom2': -0.357, 'normmom32': 3.591, 'normmom4': 4.516, 'normmom64': 2.49, 'normmom8': 3.647} ann. std {'normmom16': 3.711, 'normmom2': 8.879, 'normmom32': 4.045, 'normmom4': 5.945, 'normmom64': 4.343, 'normmom8': 4.254} ann. SR {'normmom16': 0.95, 'normmom2': -0.04, 'normmom32': 0.89, 'normmom4': 0.76, 'normmom64': 0.57, 'normmom8': 0.86}



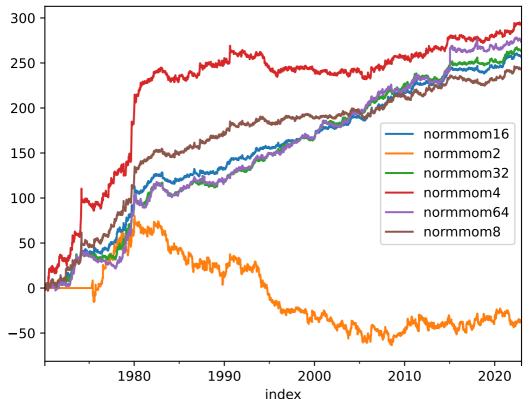
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.072, 'normmom2': 0.201, 'normmom32': 3.187, 'normmom4': 2.904, 'normmom64': 4.486, 'normmom8': 2.338} ann. std {'normmom16': 3.582, 'normmom2': 9.084, 'normmom32': 3.731, 'normmom4': 5.496, 'normmom64': 8.561, 'normmom8': 4.056} ann. SR {'normmom16': 0.86, 'normmom2': 0.02, 'normmom32': 0.85, 'normmom4': 0.53, 'normmom64': 0.52, 'normmom8': 0.58}



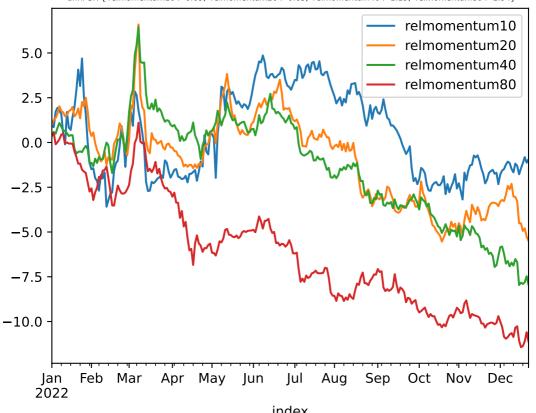
Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.762, 'normmom2': -0.695, 'normmom32': 4.881, 'normmom4': 5.442, 'normmom64': 5.089, 'normmom8': 4.501} ann. std {'normmom16': 4.925, 'normmom2': 11.204, 'normmom32': 4.993, 'normmom4': 8.325, 'normmom64': 6.312, 'normmom8': 5.934} ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.81, 'normmom8': 0.76}



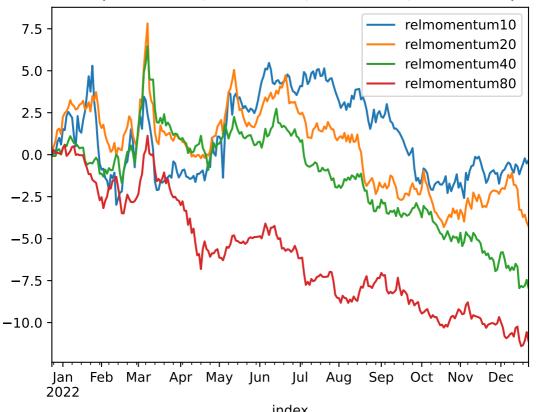
Total Trading Rule P&L for period 'YTD'

ann. mean {"relmomentum10": -0.951, 'relmomentum20": -5.534, 'relmomentum40": -7.999, 'relmomentum80": -11.2} ann. std {"relmomentum10": 10.063, 'relmomentum20": 8.544, 'relmomentum40": 6.75, 'relmomentum80": 5.771} ann. SR {"relmomentum10": -0.09, 'relmomentum20": -0.65, 'relmomentum40": -1.19, 'relmomentum80": -1.94}



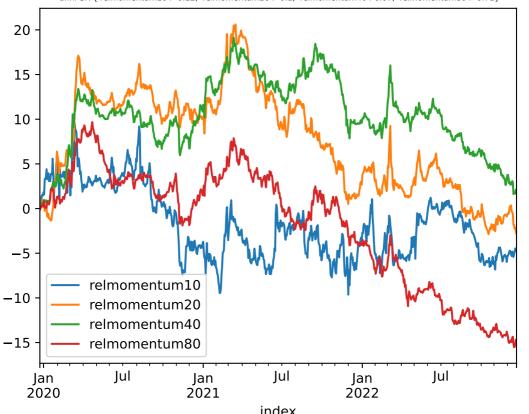
Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -0.335, 'relmomentum20': -4.201, 'relmomentum40': -7.803, 'relmomentum80': -10.914} ann. std {'relmomentum10': 9.98, 'relmomentum20': 8.499, 'relmomentum40': 6.689, 'relmomentum80': 5.715} ann. SR {'relmomentum10': -0.03, 'relmomentum20': -0.49, 'relmomentum40': -1.17, 'relmomentum80': -1.91}



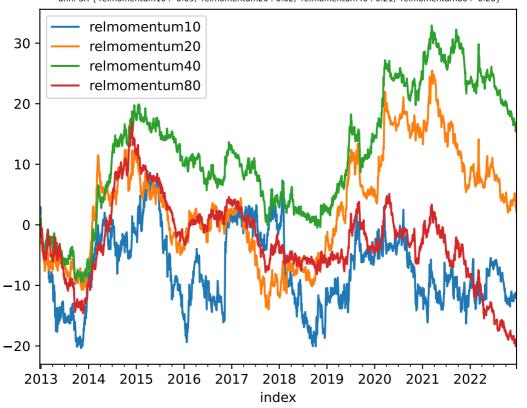
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.5, 'relmomentum20': -0.922, 'relmomentum40': 0.539, 'relmomentum80': -4.968} ann. std {'relmomentum10': 12.725, 'relmomentum20': 9.068, 'relmomentum40': 7.467, 'relmomentum80': 6.958} ann. SR {'relmomentum10': 0.12, 'relmomentum20': -0.11, 'relmomentum40': 0.07, 'relmomentum80': -0.71}



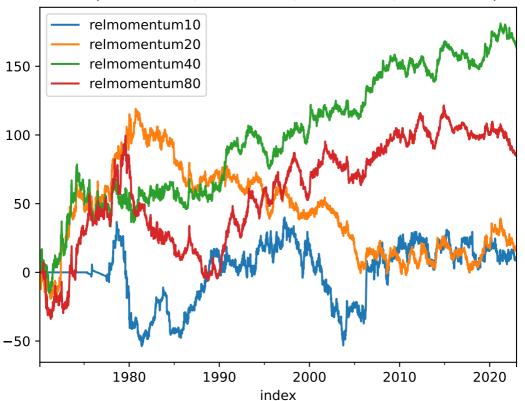
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.105, 'relmomentum20': 0.201, 'relmomentum40': 1.516, 'relmomentum80': -1.937} ann. std {'relmomentum10': 12.973, 'relmomentum20': 9.037, 'relmomentum40': 7.374, 'relmomentum80': 6.832} ann. SR {'relmomentum10': -0.09, 'relmomentum40': 0.21, 'relmomentum80': -0.28}

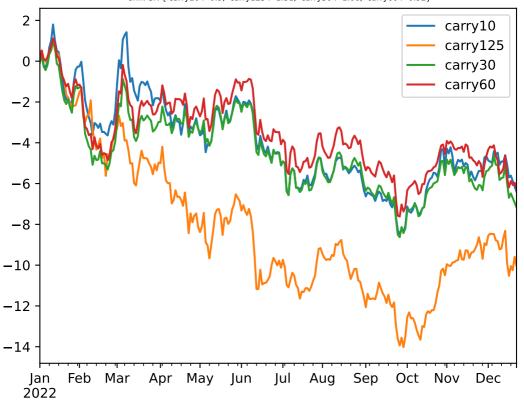


Total Trading Rule P&L for period '99Y'

ann. mean {'relmomentum10': 0.202, 'relmomentum20': 0.293, 'relmomentum40': 3.037, 'relmomentum80': 1.574} ann. std {'relmomentum10': 13.365, 'relmomentum20': 11.528, 'relmomentum40': 10.798, 'relmomentum80': 11.055} ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': -6.439, 'carry125': -10.112, 'carry30': -7.217, 'carry60': -6.293} ann. std {'carry10': 7.168, 'carry15': 7.726, 'carry30': 6.825, 'carry60': 6.862} ann. SR {'carry10': -0.9, 'carry125': -1.31, 'carry30': -1.06, 'carry60': -0.92}



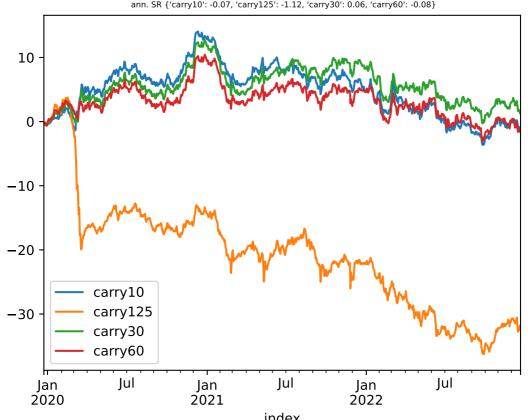
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Total Trading Rule P&L for period '1Y' ann. mean {'carry10': -6.721, 'carry125': -9.933, 'carry30': -7.39, 'carry60': -6.4} ann. std {'carry10': 7.117, 'carry125': 7.642, 'carry30': 6.765, 'carry60': 6.791} ann. SR {'carry10': -0.94, 'carry125': -1.3, 'carry30': -1.09, 'carry60': -0.94}

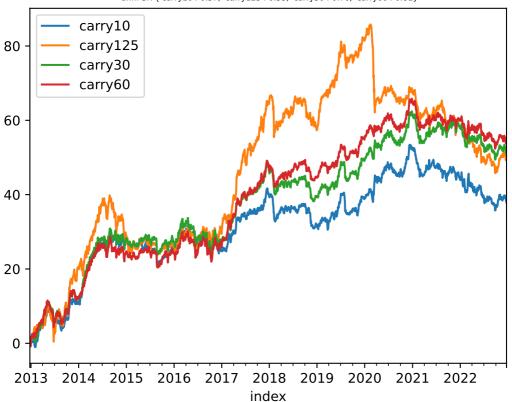


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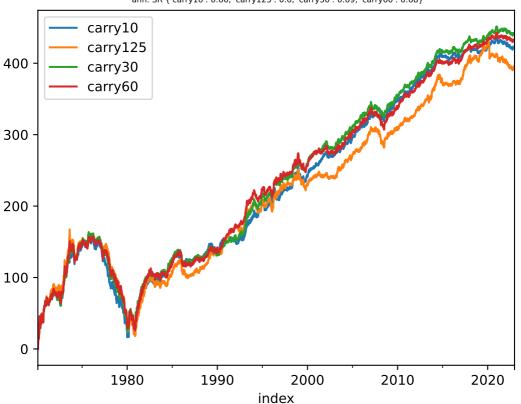
Total Trading Rule P&L for period '3Y' ann. mean {'carry10': -0.507, 'carry125': -10.551, 'carry30': 0.385, 'carry60': -0.546} ann. std {'carry10': 6.822, 'carry125': 9.441, 'carry30': 6.623, 'carry60': 6.568} ann. SR {'carry10': -0.07, 'carry125': -1.12, 'carry30': 0.06, 'carry60': -0.08}



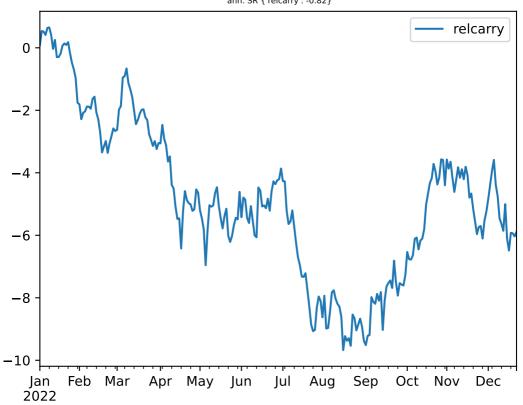
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 3.713, 'carry125': 4.882, 'carry30': 4.992, 'carry60': 5.273} ann. std {'carry10': 6.463, 'carry125': 9.143, 'carry30': 6.576, 'carry60': 6.544} ann. SR {'carry10': 0.57, 'carry125': 0.53, 'carry30': 0.76, 'carry60': 0.81}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.81, 'carry125': 7.312, 'carry30': 8.162, 'carry60': 7.994}
ann. std {'carry10': 11.862, 'carry125': 12.103, 'carry30': 11.874, 'carry60': 11.825}
ann. SR {'carry10': 0.66, 'carry125': 0.6, 'carry30': 0.69, 'carry60': 0.68}

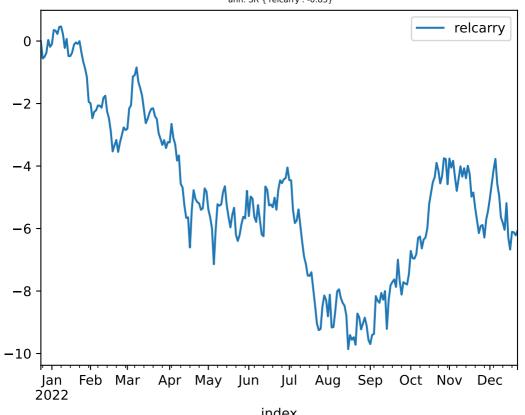


Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': -5.934} ann. std {'relcarry': 7.235} ann. SR {'relcarry': -0.82}

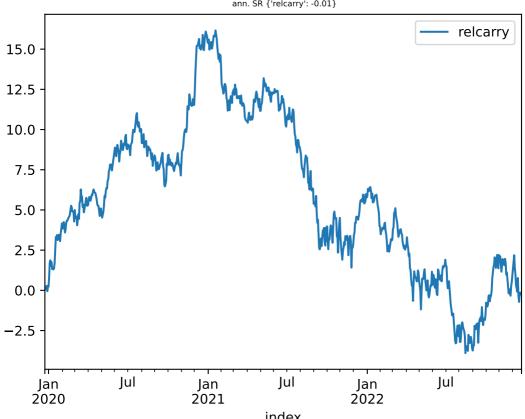


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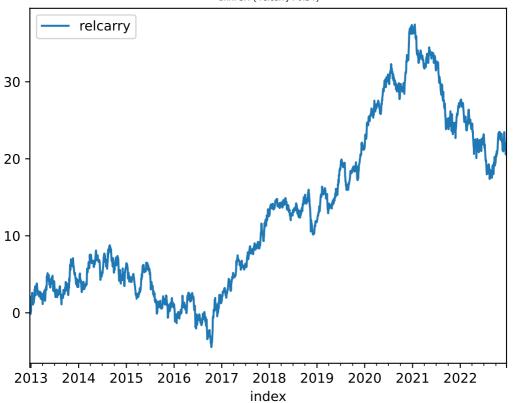
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': -5.979} ann. std {'relcarry': 7.187} ann. SR {'relcarry': -0.83}



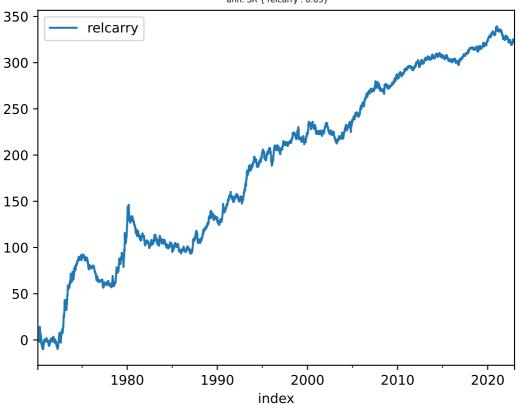
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': -0.038} ann. std {'relcarry': 6.864} ann. SR {'relcarry': -0.01}



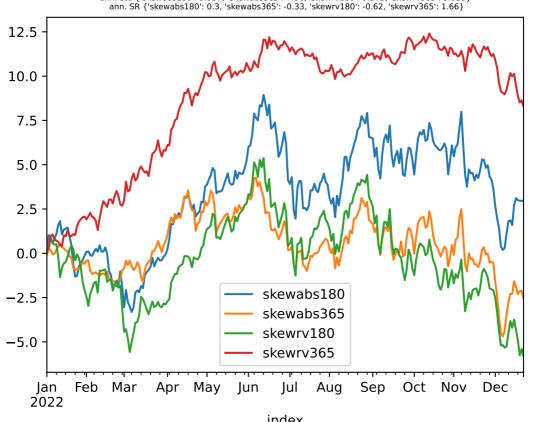
Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 2.077} ann. std {'relcarry': 6.051} ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 5.991} ann. std {'relcarry': 9.56} ann. SR {'relcarry': 0.63}

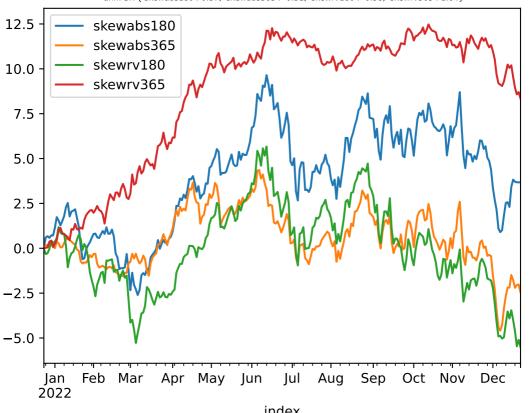


Total Trading Rule P&L for period 'YTD' ann. mean {'skewabs180': 2.995, 'skewabs365': -2.573, 'skewrv180': -5.851, 'skewrv365': 8.345} ann. std {'skewabs180': 9.957, 'skewabs365': 7.86, 'skewrv180': 9.375, 'skewrv365': 5.033}

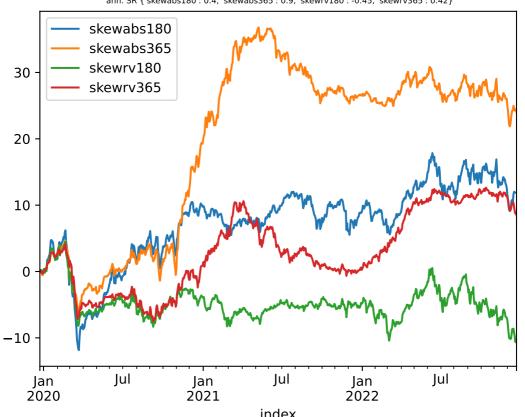


Total Trading Rule P&L for period '1Y'

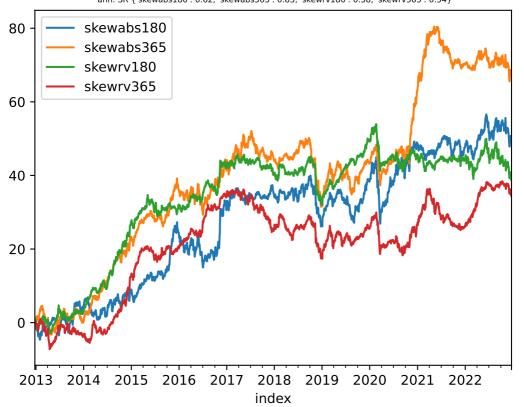
ann. mean {'skewabs180': 3.627, 'skewabs365': -2.415, 'skewrv180': -5.426, 'skewrv365': 8.218} ann. std {'skewabs180': 9.857, 'skewabs365': 7.772, 'skewrv180': 9.286, 'skewrv365': 4.999} ann. SR {'skewabs180': 0.37, 'skewabs365': -0.31, 'skewrv180': -0.58, 'skewrv365': 1.64}



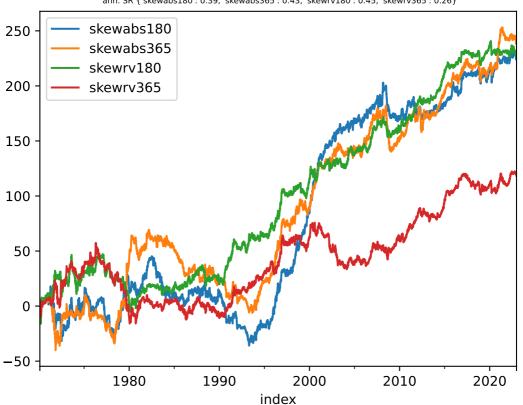
Total Trading Rule P&L for period '3Y' ann. mean {'skewabs180': 3.885, 'skewabs365': 7.849, 'skewrv180': -3.484, 'skewrv365': 2.785} ann. std {'skewabs180': 9.612, 'skewabs365': 8.759, 'skewrv180': 7.815, 'skewrv365': 6.591} ann. SR {'skewabs180': 0.4, 'skewabs365': 0.9, 'skewrv180': -0.45, 'skewrv365': 0.42}



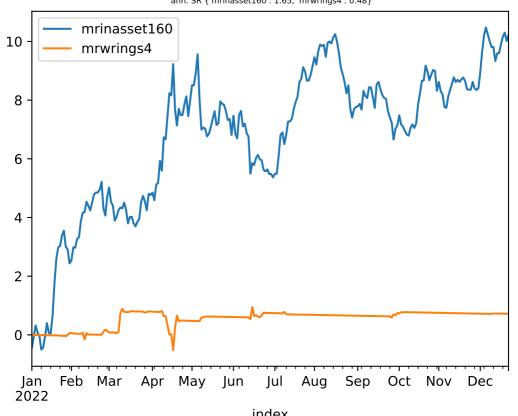
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.968, 'skewabs365': 6.644, 'skewrv180': 3.806, 'skewrv365': 3.367}
ann. std {'skewabs180': 8.076, 'skewabs365': 7.996, 'skewrv180': 6.604, 'skewrv365': 6.179}
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.83, 'skewrv180': 0.58, 'skewrv365': 0.54}



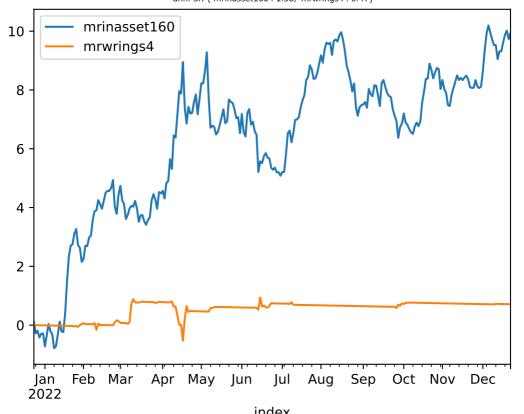
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.205, 'skewabs365': 4.459, 'skewrv180': 4.186, 'skewrv365': 2.195}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.298, 'skewrv180': 9.31, 'skewrv365': 8.604}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



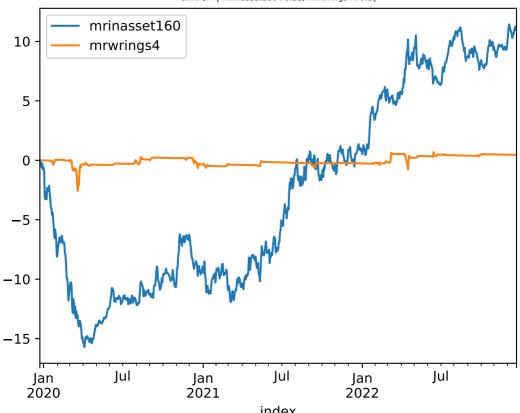
Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': 10.298, 'mrwrings4': 0.725} ann. std {'mrinasset160': 6.256, 'mrwrings4': 1.499} ann. SR {'mrinasset160': 1.65, 'mrwrings4': 0.48}



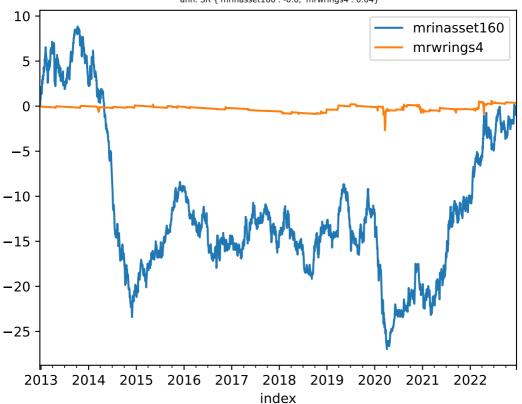
Total Trading Rule P&L for period '1Y' ann. mean {"mrinasset160": 9.783, 'mrwrings4": 0.7} ann. std {"mrinasset160": 6.206, 'mrwrings4": 1.481} ann. SR {"mrinasset160": 1.58, 'mrwrings4": 0.47}



Total Trading Rule P&L for period '3Y' ann. mean {"mrinasset160': 3.652, 'mrwrings4': 0.15} ann. std {'mrinasset160': 0.82, 'mrwrings4': 1.535} ann. SR {'mrinasset160': 0.52, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.008, 'mrwrings4': 0.036} ann. std {'mrinasset160': 6.627, 'mrwrings4': 0.897} ann. SR {'mrinasset160': -0.0, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y' ann. mean { 'mrinasset160': -3.342, 'mrwrings4': -1.171 } ann. std { 'mrinasset160': 10.922, 'mrwrings4': 2.631 } ann. SR { 'mrinasset160': -0.31, 'mrwrings4': -0.45 }

