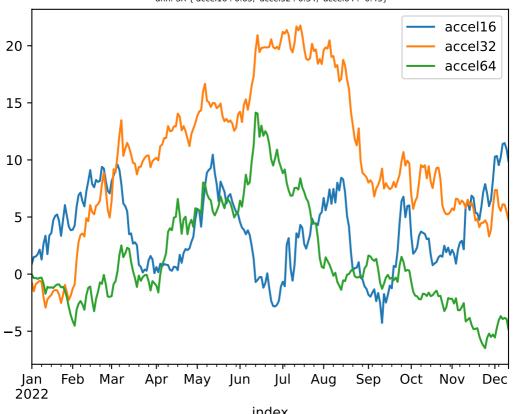
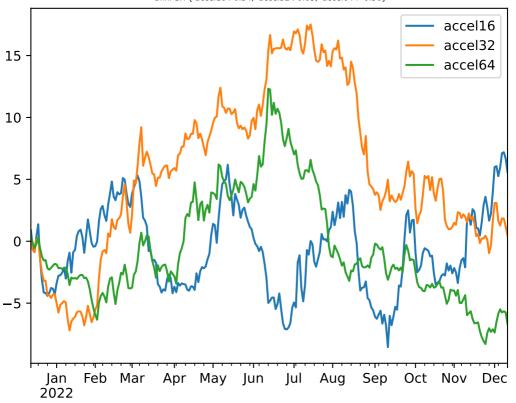
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': 10.283, 'accel32': 4.914, 'accel64': -5.045} ann. std {'accel16': 16.308, 'accel32': 14.362, 'accel64': 11.87} ann. SR {'accel16': 0.63, 'accel32': 0.34, 'accel64': -0.43}

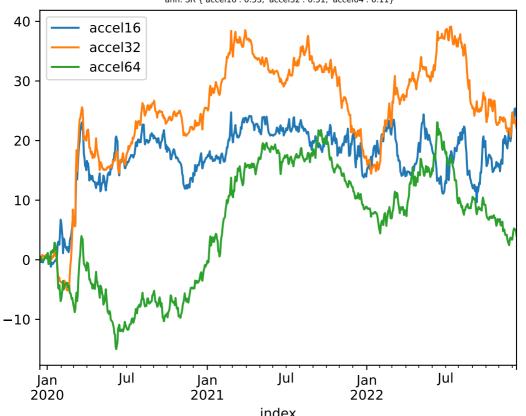


Total Trading Rule P&L for period '1Y' ann. mean {'accel16': 5.51, 'accel32': 0.451, 'accel64': -6.565} ann. std {'accel16': 16.405, 'accel32': 14.245, 'accel64': 11.663} ann. SR {'accel16': 0.34, 'accel32': 0.03, 'accel64': -0.56}

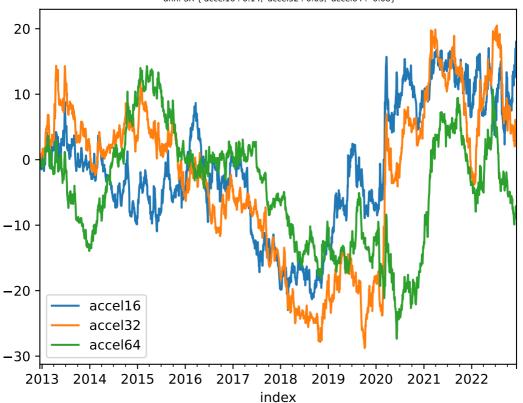


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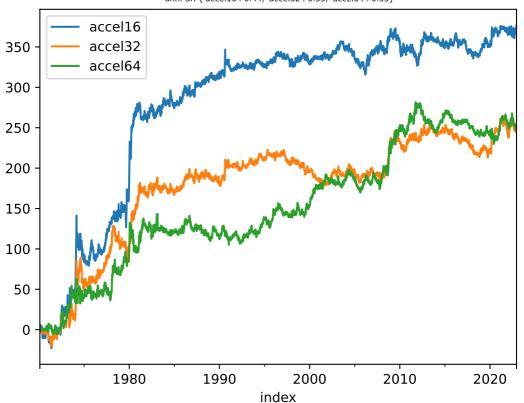
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 7.804, 'accel32': 7.242, 'accel64': 1.338}
ann. std {'accel16': 14.86, 'accel32': 14.081, 'accel64': 11.749}
ann. SR {'accel16': 0.53, 'accel32': 0.51, 'accel64': 0.11}



Total Trading Rule P&L for period '10Y'
ann. mean {'iaccel16': 1.617, 'accel32': 0.338, 'accel64': -0.812}
ann. std {'accel16': 11.903, 'accel32': 11.128, 'accel64': 9.573}
ann. SR {'accel16': 0.14, 'accel32': 0.03, 'accel64': -0.08}

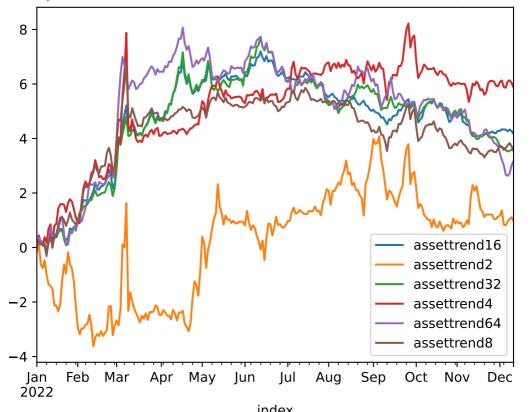


Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.962, 'accel32': 4.552, 'accel64': 4.62} ann. std {'accel16': 15.732, 'accel32': 13.795, 'accel64': 13.333} ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}



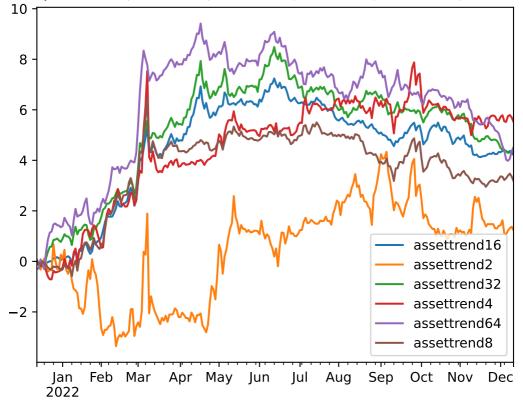
Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.337, 'assettrend2': 1.009, 'assettrend32': 3.796, 'assettrend4': 6.108, 'assettrend64': 3.296, 'assettrend8': 3.687} ann. std {'assettrend16': 3.093, 'assettrend2': 7.858, 'assettrend32': 3.417, 'assettrend4': 5.872, 'assettrend64': 4.076, 'assettrend8': 3.845} ann. SR {'assettrend16': 1.4, 'assettrend2': 0.13, 'assettrend3': 0.96}



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

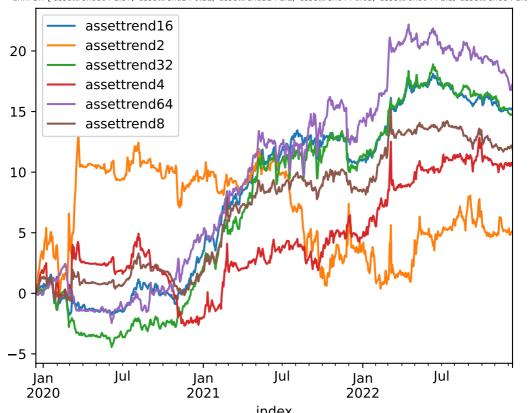
ann. mean {'assettrend16': 4.148, 'assettrend2': 1.214, 'assettrend32': 4.349, 'assettrend4': 5.441, 'assettrend64': 4.448, 'assettrend8': 3.136} ann. std {'assettrend16': 3.02, 'assettrend2': 7.784, 'assettrend32': 3.387, 'assettrend4': 5.736, 'assettrend64': 4.098, 'assettrend8': 3.754} ann. SR {'assettrend16': 1.37, 'assettrend2': 0.16, 'assettrend32': 1.28, 'assettrend4': 0.95, 'assettrend64': 1.09, 'assettrend8': 0.84}



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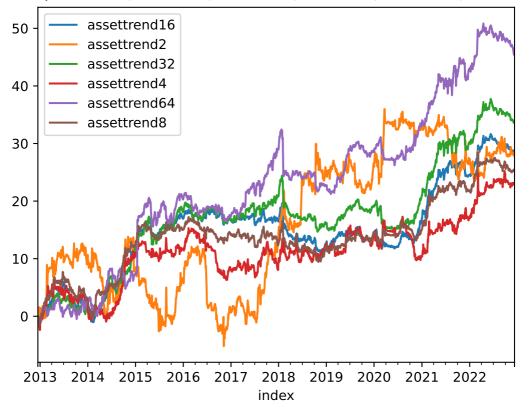
Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.947, 'assettrend2': 1.629, 'assettrend32': 4.863, 'assettrend4': 3.444, 'assettrend64': 5.667, 'assettrend8': 3.907} ann. std {'assettrend16': 3.608, 'assettrend2': 7.892, 'assettrend32': 4.427, 'assettrend4': 5.46, 'assettrend64': 5.133, 'assettrend8': 3.762} ann. SR {'assettrend16': 1.37, 'assettrend2': 0.21, 'assettrend2': 1.1, 'assettrend4': 0.63, 'assettrend64': 1.1, 'assettrend8': 1.04}



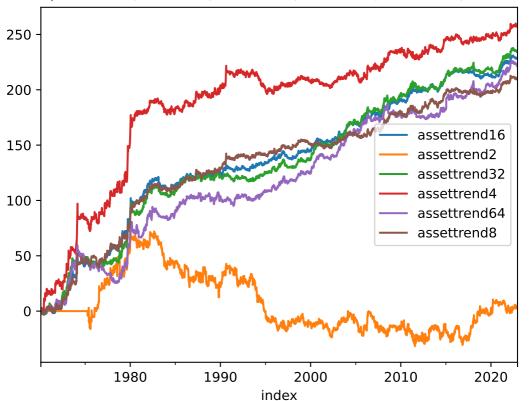
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.811, 'assettrend2': 2.756, 'assettrend32': 3.308, 'assettrend4': 2.247, 'assettrend64': 4.512, 'assettrend8': 2.476} ann. std {'assettrend16': 3.282, 'assettrend2': 8.449, 'assettrend32': 3.761, 'assettrend4': 5.038, 'assettrend64': 5.314, 'assettrend8': 3.59} ann. SR {'assettrend16': 0.86, 'assettrend2': 0.33, 'assettrend32': 0.88, 'assettrend4': 0.45, 'assettrend64': 0.85, 'assettrend8': 0.69}



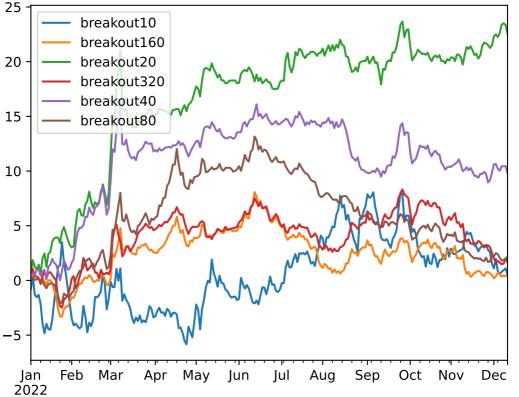
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.231, 'assettrend2': 0.049, 'assettrend32': 4.341, 'assettrend4': 4.782, 'assettrend64': 4.108, 'assettrend8': 3.89} ann. std {'assettrend16': 4.663, 'assettrend2': 10.055, 'assettrend32': 4.898, 'assettrend4': 7.353, 'assettrend64': 5.473, 'assettrend68': 5.039} ann. SR {'assettrend16': 0.91, 'assettrend2': 0.0, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.775, 'assettrend8': 0.75, 'assettrend8': 0.75,



Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.56, 'breakout160': 0.365, 'breakout20': 23.489, 'breakout320': 2.256, 'breakout40': 10.192, 'breakout80': 1.69} ann. std {'breakout10': 13.913, 'breakout160': 7.246, 'breakout20': 12.279, 'breakout320': 7.578, 'breakout40': 9.759, 'breakout80': 7.972} ann. SR {'breakout10': 0.04, 'breakout160': 0.05, 'breakout20': 1.91, 'breakout320': 0.3, 'breakout40': 1.04, 'breakout80': 0.21}

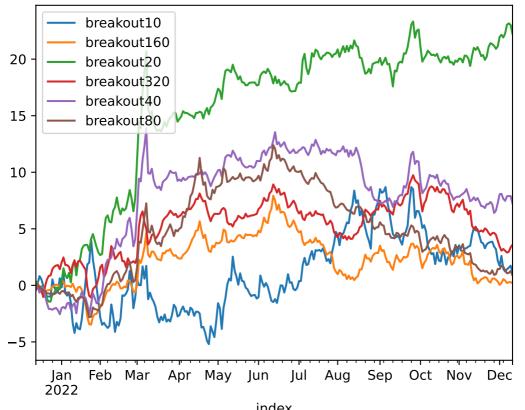


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Total Trading Rule P&L for period '1Y'

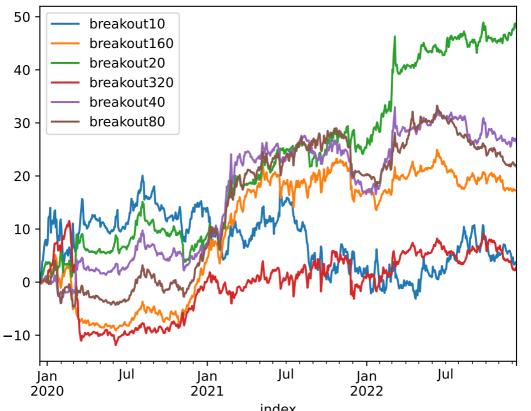
'breakout160': 0.197 'breakout20': 21.886 'breakout320': 3.537 'breakout40': 7.126 'b

ann. mean {'breakout10': 1.148, 'breakout160': 0.197, 'breakout20': 21.886, 'breakout320': 3.537, 'breakout40': 7.126, 'breakout80': 0.857} ann. std {'breakout10': 13.75, 'breakout160': 7.117, 'breakout20': 12.035, 'breakout320': 7.54, 'breakout40': 9.601, 'breakout80': 7.77} ann. SR {'breakout10': 0.08, 'breakout160': 0.03, 'breakout20': 1.82, 'breakout320': 0.47, 'breakout40': 0.74, 'breakout80': 0.11}



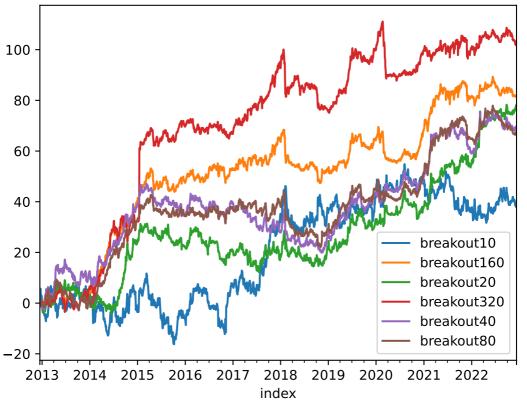
Total Trading Rule P&L for period '3Y'

ann. mean ('breakout10': 1.061, 'breakout160': 5.655, 'breakout20': 15.675, 'breakout320': 0.949, 'breakout40': 8.635, 'breakout80': 7.122} ann. std ('breakout10': 15.105, 'breakout160': 9.759, 'breakout20': 11.527, 'breakout320': 10.763, 'breakout40': 9.945, 'breakout80': 9.591} ann. SR ('breakout10': 0.07, 'breakout160': 0.58, 'breakout20': 1.36, 'breakout320': 0.09, 'breakout40': 0.87, 'breakout40': 0.74}



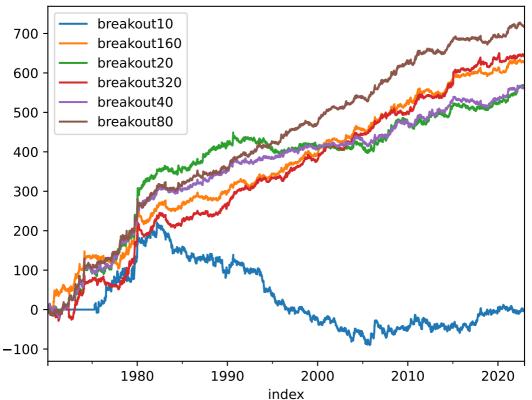
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.733, 'breakout160': 8.014, 'breakout20': 7.579, 'breakout320': 10.066, 'breakout40': 6.753, 'breakout80': 6.521} ann. std {'breakout10': 15.768, 'breakout160': 9.141, 'breakout20': 11.211, 'breakout320': 13.348, 'breakout40': 9.84, 'breakout80': 9.017} ann. SR {'breakout10': 0.24, 'breakout160': 0.88, 'breakout20': 0.68, 'breakout320': 0.75, 'breakout40': 0.69, 'breakout80': 0.72}



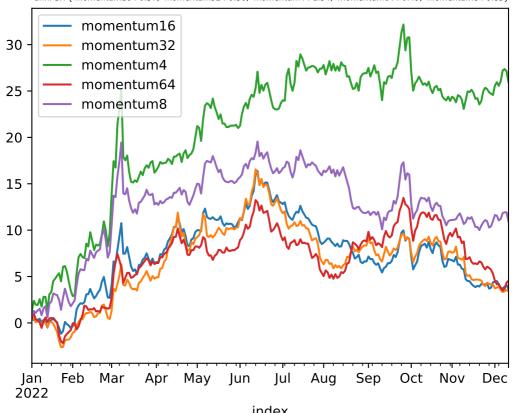
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.084, 'breakout160': 11.63, 'breakout20': 10.554, 'breakout320': 11.913, 'breakout40': 10.422, 'breakout80': 13.3} ann. std {'breakout10': 20.846, 'breakout160': 12.504, 'breakout20': 16.111, 'breakout320': 13.057, 'breakout40': 13.24, 'breakout80': 12.763} ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.66, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.04}



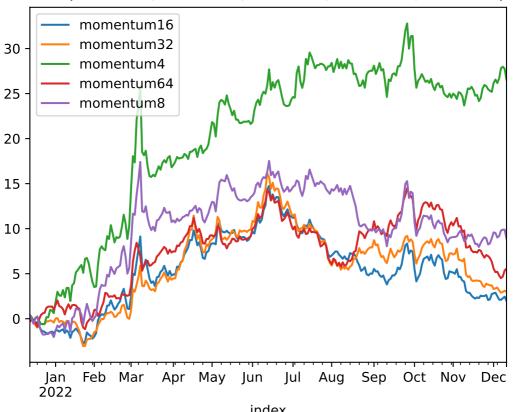
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 3.76, 'momentum32': 3.559, 'momentum4': 27.007, 'momentum64': 4.721, 'momentum8': 11.367} ann. std {'momentum16': 10.215, 'momentum32': 9.856, 'momentum4': 17.577, 'momentum64': 9.548, 'momentum8': 13.416} ann. SR {'momentum16': 0.37, 'momentum8': 0.85, 'momentum4': 1.54, 'momentum64': 0.49, 'momentum8': 0.85}



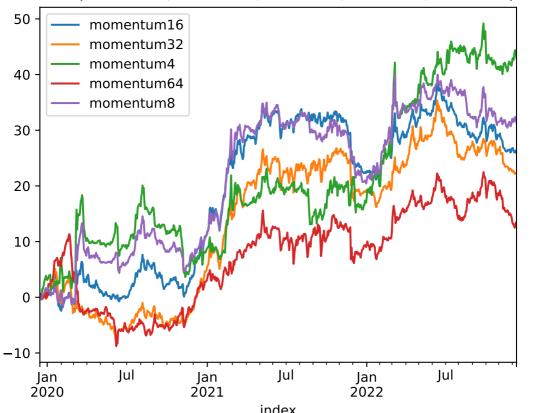
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 1.957, 'momentum32': 2.941, 'momentum4': 26.158, 'momentum64': 5.466, 'momentum8': 8.75} ann. std {'momentum16': 9.978, 'momentum32': 9.63, 'momentum4': 17.162, 'momentum64': 9.383, 'momentum8': 13.155} ann. SR {'momentum16': 0.2, 'momentum32': 0.31, 'momentum4': 1.52, 'momentum64': 0.58, 'momentum8': 0.67}



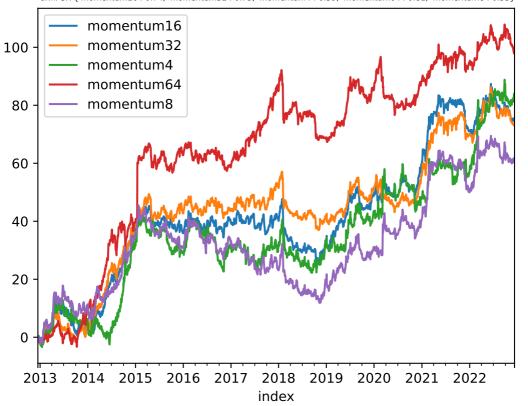
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.496, 'momentum32': 7.292, 'momentum4': 14.081, 'momentum64': 4.441, 'momentum8': 10.277} ann. std {'momentum16': 10.998, 'momentum32': 10.872, 'momentum4': 16.085, 'momentum64': 10.975, 'momentum64': 12.748} ann. SR {'momentum16': 0.77, 'momentum32': 0.67, 'momentum4': 0.88, 'momentum64': 0.4, 'momentum8': 0.81}



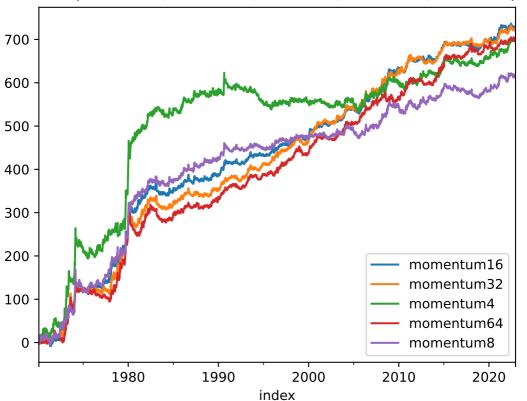
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.328, 'momentum32': 7.177, 'momentum4': 8.112, 'momentum64': 9.715, 'momentum8': 5.974} ann. std {'momentum16': 9.953, 'momentum32': 9.507, 'momentum4': 13.687, 'momentum64': 12.014, 'momentum8': 11.324} ann. SR {'momentum16': 0.74, 'momentum32': 0.75, 'momentum4': 0.59, 'momentum64': 0.81, 'momentum8': 0.53}



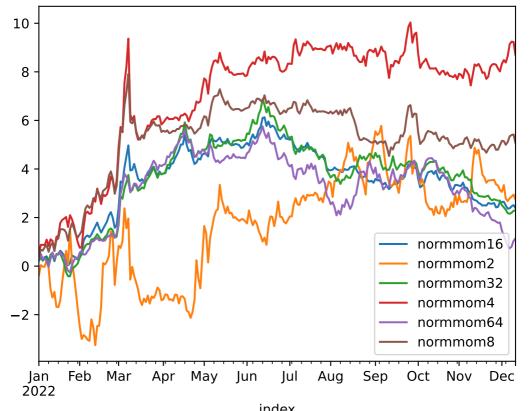
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.444, 'momentum32': 13.348, 'momentum4': 12.967, 'momentum64': 12.929, 'momentum8': 11.384} ann. std {'momentum16': 14.231, 'momentum32': 13.862, 'momentum4': 20.088, 'momentum64': 13.498, 'momentum8': 15.881} ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.65, 'momentum64': 0.96, 'momentum8': 0.72



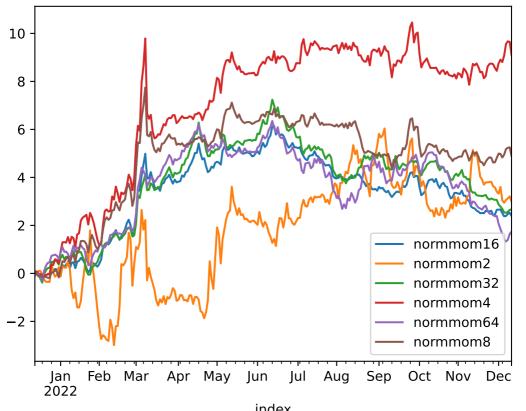
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.486, 'normmom2': 2.846, 'normmom32': 2.395, 'normmom4': 9.044, 'normmom64': 1.186, 'normmom8': 5.271} ann. std {'normmom16': 3.171, 'normmom2': 8.199, 'normmom32': 3.239, 'normmom4': 6.091, 'normmom64': 3.504, 'normmom8': 4.337} ann. SR {'normmom16': 0.78, 'normmom2': 0.35, 'normmom32': 0.74, 'normmom4': 1.48, 'normmom64': 0.34, 'normmom8': 1.22}



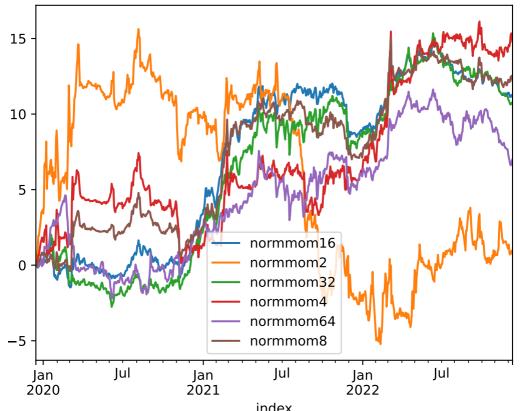
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.364, 'normmom2': 2.953, 'normmom32': 2.627, 'normmom4': 8.973, 'normmom64': 1.709, 'normmom8': 4.824} ann. std {'normmom16': 3.1, 'normmom2': 8.037, 'normmom32': 3.202, 'normmom4': 5.943, 'normmom64': 3.462, 'normmom8': 4.237} ann. SR {'normmom16': 0.76, 'normmom2': 0.37, 'normmom32': 0.82, 'normmom4': 1.51, 'normmom64': 0.49, 'normmom8': 1.14}



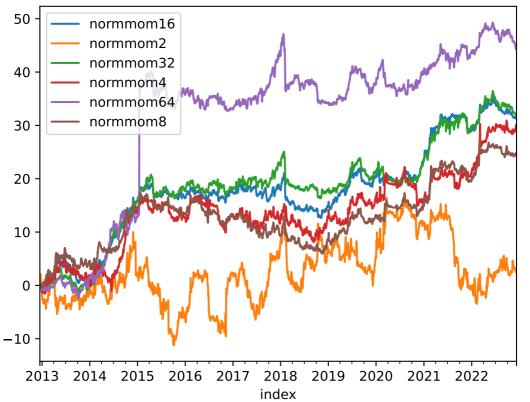
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.656, 'normmom2': 0.25, 'normmom32': 3.534, 'normmom4': 4.847, 'normmom64': 2.299, 'normmom8': 3.992} ann. std {'normmom16': 3.706, 'normmom2': 8.895, 'normmom32': 4.053, 'normmom4': 5.947, 'normmom64': 4.349, 'normmom8': 4.25} ann. SR {'normmom16': 0.99, 'normmom2': 0.03, 'normmom32': 0.87, 'normmom4': 0.81, 'normmom64': 0.53, 'normmom8': 0.94}



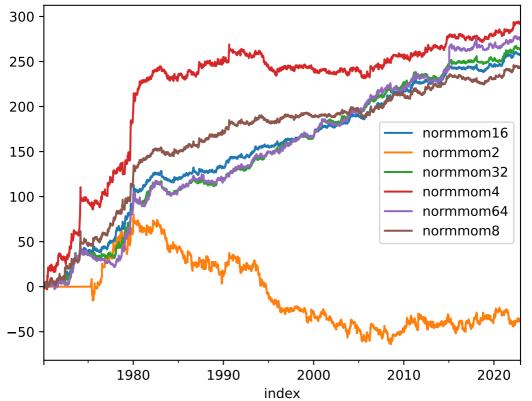
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.077, 'normmom2': 0.248, 'normmom32': 3.13, 'normmom4': 2.905, 'normmom64': 4.388, 'normmom8': 2.412} ann. std {'normmom16': 3.58, 'normmom2': 9.1, 'normmom32': 3.733, 'normmom4': 5.498, 'normmom64': 8.564, 'normmom8': 4.055} ann. SR {'normmom16': 0.86, 'normmom2': 0.03, 'normmom32': 0.84, 'normmom4': 0.53, 'normmom64': 0.51, 'normmom8': 0.59}



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

ann. mean {'normmom16': 4.77, 'normmom2': -0.706, 'normmom32': 4.88, 'normmom4': 5.442, 'normmom64': 5.08, 'normmom8': 4.514} ann. std {'normmom16': 4.926, 'normmom2': 11.206, 'normmom32': 4.995, 'normmom4': 8.327, 'normmom64': 6.314, 'normmom8': 5.935} 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'

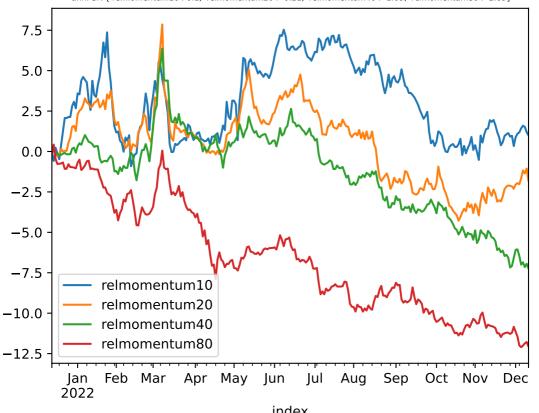
ann. mean {'relmomentum10': -1.736, 'relmomentum20': -3.201, 'relmomentum40': -7.448, 'relmomentum80': -11.459} ann. std {'relmomentum10': 10.179, 'relmomentum20': 8.567, 'relmomentum40': 6.689, 'relmomentum80': 5.709} ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.37, 'relmomentum40': -1.11, 'relmomentum80': -2.01}



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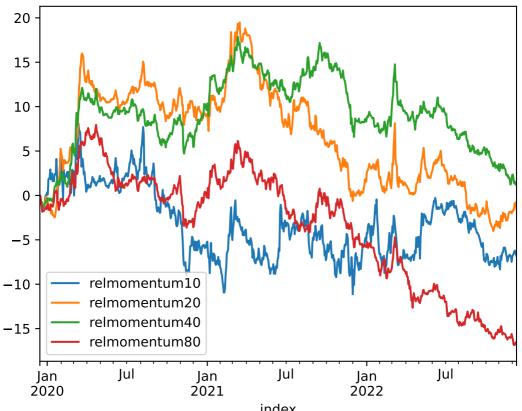
Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 0.989, 'relmomentum20': -1.782, 'relmomentum40': -7.123, 'relmomentum80': -11.873} ann. std {'relmomentum10': 10.098, 'relmomentum20': 8.417, 'relmomentum40': 6.549, 'relmomentum80': 5.689} ann. SR {'relmomentum10': 0.1, 'relmomentum20': -0.21, 'relmomentum40': -1.09, 'relmomentum80': -2.09}



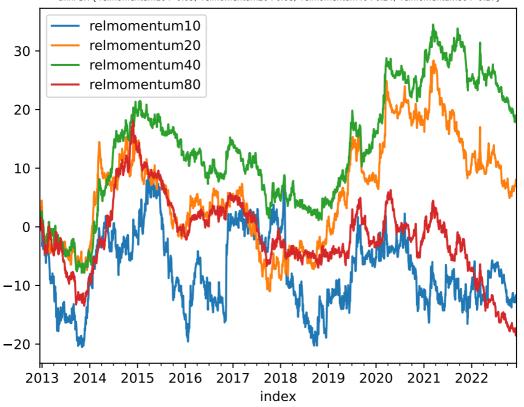
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.232, 'relmomentum20': -0.504, 'relmomentum40': 0.383, 'relmomentum80': -5.514} ann. std {'relmomentum10': 12.735, 'relmomentum20': 9.051, 'relmomentum40': 7.448, 'relmomentum80': 6.955} ann. SR {'relmomentum10': -0.18, 'relmomentum20': -0.06, 'relmomentum40': 0.05, 'relmomentum80': -0.79}



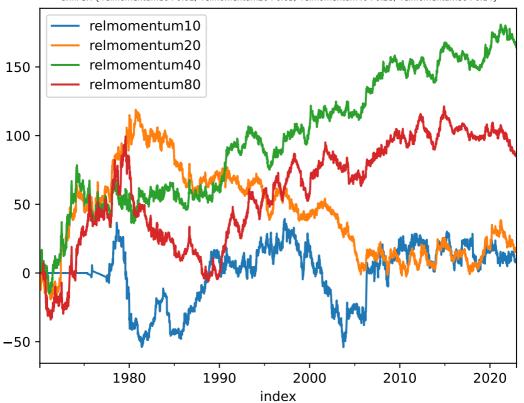
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.202, 'relmomentum20': 0.723, 'relmomentum40': 1.751, 'relmomentum80': -1.816} ann. std {'relmomentum10': 1.2987, 'relmomentum20': 9.042, 'relmomentum40': 7.372, 'relmomentum80': 6.839} ann. SR {'relmomentum10': 0.04, 'relmomentum40': 0.24, 'relmomentum80': -0.27}



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

ann. mean {'relmomentum10': 0.171, 'relmomentum20': 0.326, 'relmomentum40': 3.049, 'relmomentum80': 1.574} ann. std {'relmomentum10': 13.329, 'relmomentum20': 1.1.67} 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': -5.122, 'carry125': -9.59, 'carry30': -6.042, 'carry60': -5.784} ann. std {'carry10': 7.221, 'carry125': 7.573, 'carry30': 6.807, 'carry60': 6.818} ann. SR {'carry10': -0.71, 'carry125': -1.27, 'carry30': -0.89, 'carry60': -0.85}

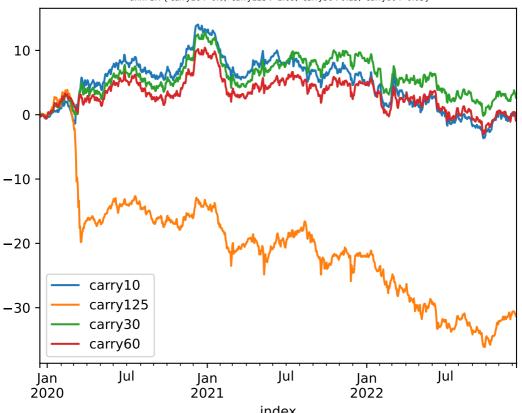


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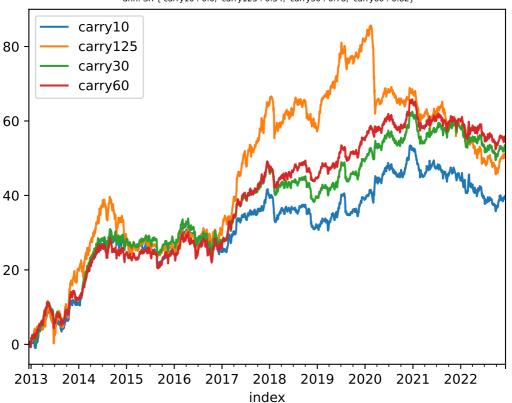
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -6.241, 'carry125': -9.509, 'carry30': -6.512, 'carry60': -5.603}
ann. std {'carry10': 7.125, 'carry125': 7.42, 'carry30': 6.685, 'carry60': 6.671}
ann. SR {'carry10': -0.88, 'carry125': -1.28, 'carry30': -0.97, 'carry60': -0.84}



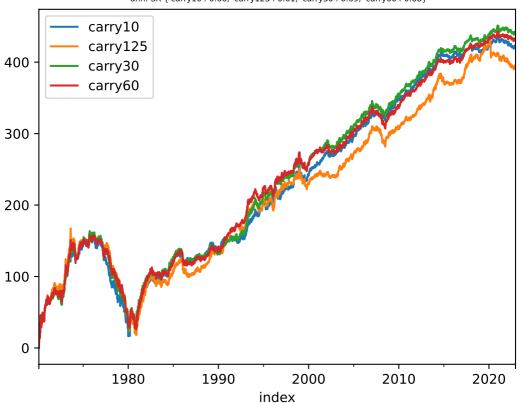
Total Trading Rule P&L for period '37' ann. mean {'carry10': -0.034, 'carry125': -10.27, 'carry30': 0.862, 'carry60': -0.321} ann. std {'carry10': 6.809, 'carry125': 9.389, 'carry30': 6.589, 'carry60': 6.527} ann. SR {'carry10': -0.0, 'carry125': -1.09, 'carry30': 0.13, 'carry60': -0.05}



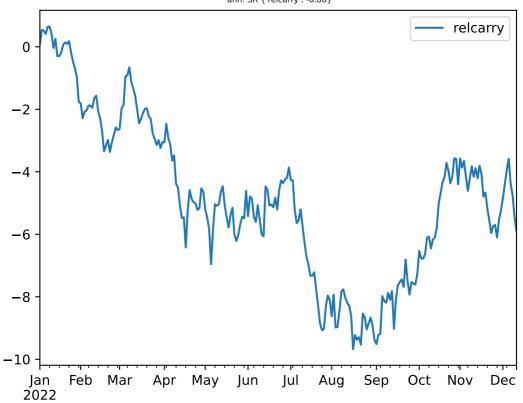
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 3.861, 'carry125': 4.953, 'carry30': 5.136, 'carry60': 5.345} ann. std {'carry10': 6.462, 'carry125': 9.129, 'carry30': 6.573, 'carry60': 6.539} ann. SR {'carry10': 0.6, 'carry125': 0.54, 'carry30': 0.78, 'carry60': 0.82}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.84, 'carry125': 7.331, 'carry30': 8.19, 'carry60': 8.01}
ann. std {'carry10': 11.864, 'carry125': 12.104, 'carry30': 11.876, 'carry60': 11.826}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}

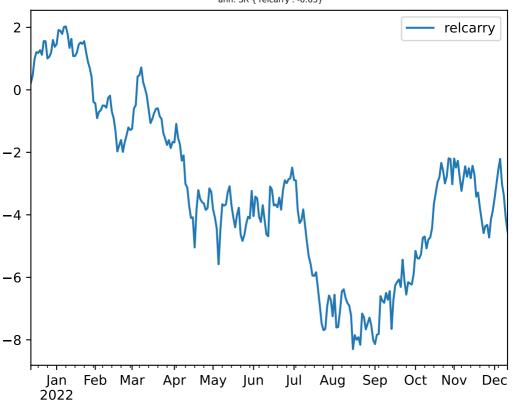


Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': -6.146} ann. std {'relcarry': 7.185} ann. SR {'relcarry': -0.86}

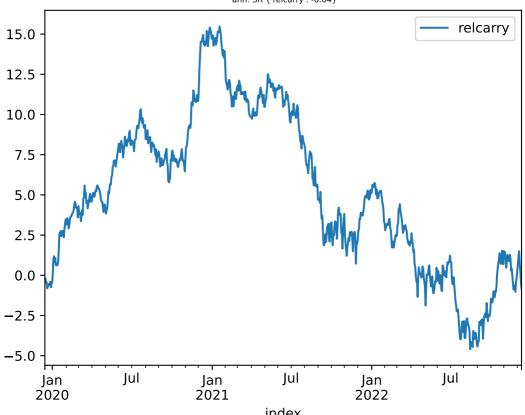


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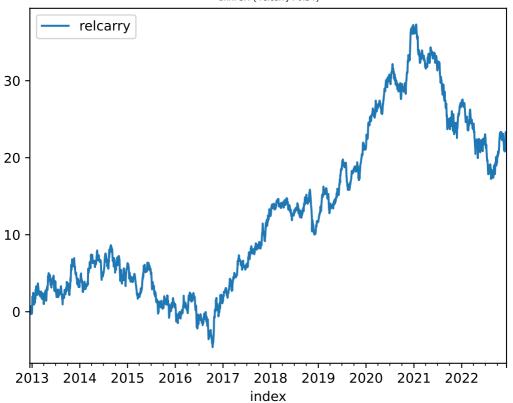
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': -4.46} ann. std {'relcarry': 7.076} ann. SR {'relcarry': -0.63}



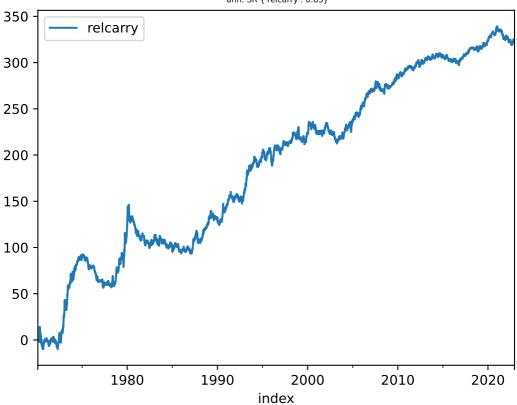
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': -0.27} ann. std {'relcarry': 6.825} ann. SR {'relcarry': -0.04}



Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 2.063} ann. std {'relcarry': 6.049} ann. SR {'relcarry': 0.34}

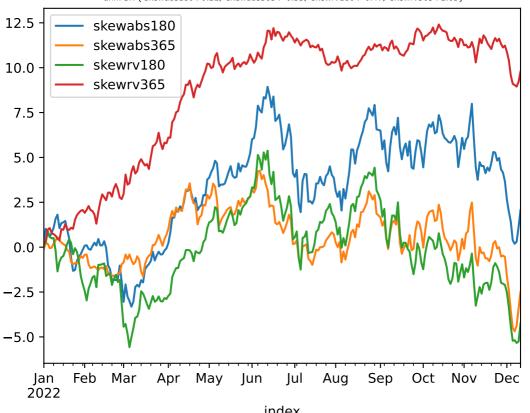


Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 5.992} ann. std {'relcarry': 9.56} ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'

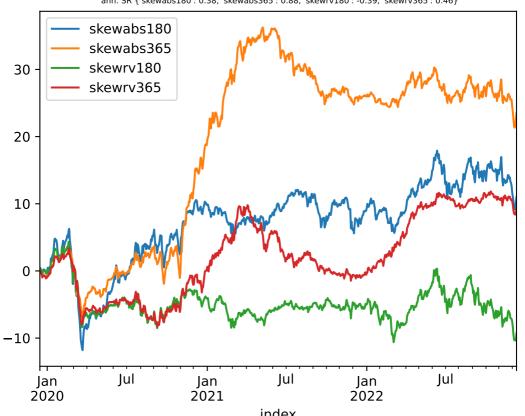
ann. mean {'skewabs180': 2.15, 'skewabs365': -2.585, 'skewrv180': -4.417, 'skewrv365': 10.186} ann. std {'skewabs180': 10.063, 'skewabs365': 7.94, 'skewrv180': 9.417, 'skewrv365': 4.974} ann. SR {'skewabs180': 0.21, 'skewabs365': -0.33, 'skewrv180': -0.47, 'skewrv365': 2.05}



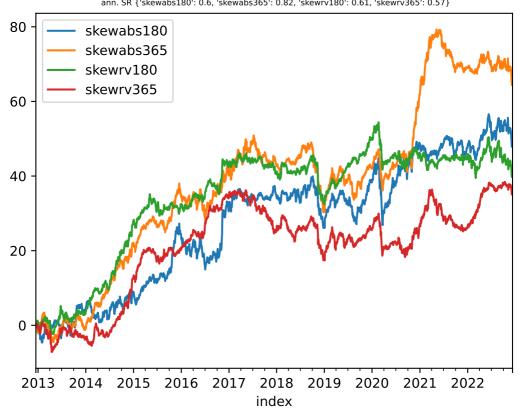
Total Trading Rule P&L for period '1Y' ann. mean {'skewabs180': 3.844, 'skewabs365': -2.126, 'skewrv180': -3.89, 'skewrv365': 9.885} ann. std {'skewabs180': 9.905, 'skewabs365': 7.766, 'skewrv180': 9.201, 'skewrv365': 4.89} ann. SR {'skewabs180': 0.39, 'skewabs365': -0.27, 'skewrv180': -0.42, 'skewrv365': 2.02}



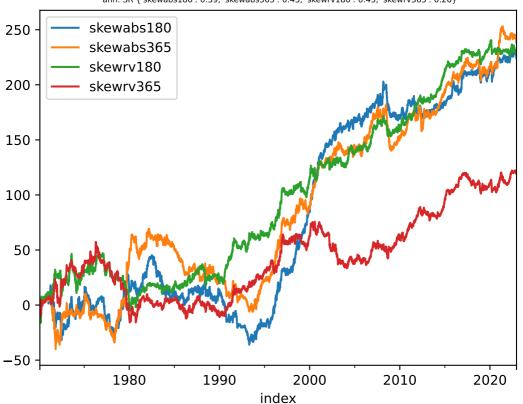
Total Trading Rule P&L for period '3Y' ann. mean {'skewabs180': 3.618, 'skewabs365': 7.717, 'skewrv180': -3.042, 'skewrv365': 3.024} ann. std {'skewabs180': 9.614, 'skewabs365': 8.764, 'skewrv180': 7.796, 'skewrv365': 6.581} ann. SR {'skewabs180': 0.38, 'skewabs365': 0.88, 'skewrv180': -0.39, 'skewrv365': 0.46}



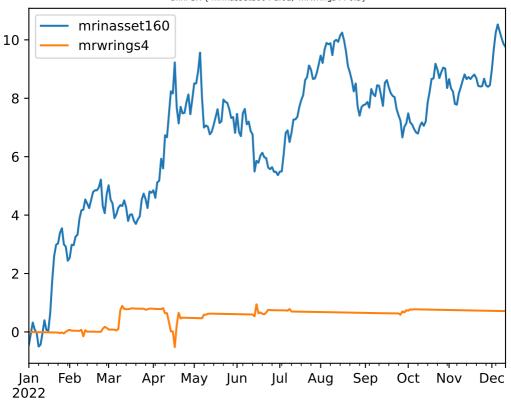
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.88, 'skewabs365': 6.538, 'skewrv180': 4.007, 'skewrv365': 3.518}
ann. std {'skewabs180': 8.075, 'skewabs365': 8.003, 'skewrv180': 6.594, 'skewrv365': 6.174}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.82, 'skewrv180': 0.61, 'skewrv365': 0.57}



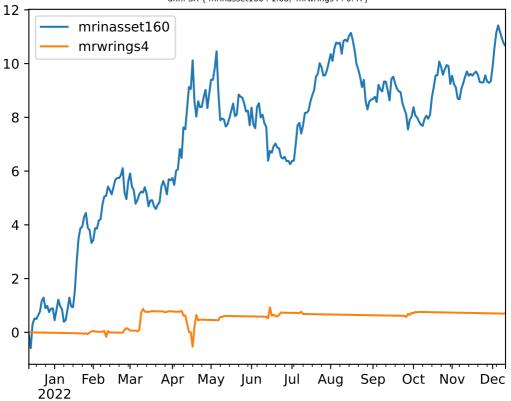
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.189, 'skewabs365': 4.461, 'skewrv180': 4.215, 'skewrv365': 2.223}
ann. std {'skewabs180': 10.795, 'skewabs365': 10.301, 'skewrv180': 9.31, 'skewrv365': 8.605}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



Total Trading Rule P&L for period 'YTD' ann. mean { 'mrinasset160': 10.155, 'mrwrings4': 0.759 } ann. std { 'mrinasset160': 6.31, 'mrwrings4': 1.523 } ann. SR { 'mrinasset160': 1.61, 'mrwrings4': 0.5 }



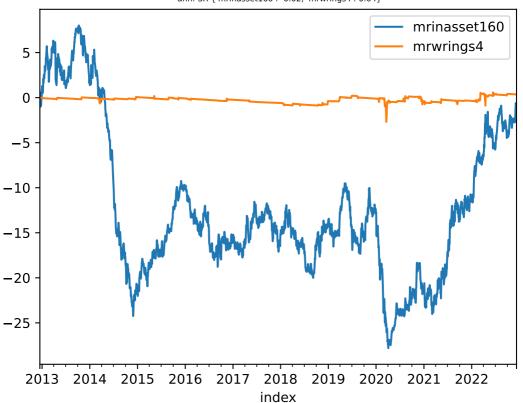
Total Trading Rule P&L for period '1Y' ann. mean {'mrinasset160': 10.486, 'mrwrings4': 0.702} ann. std {'mrinasset160': 6.256, 'mrwrings4': 1.481} ann. SR {'mrinasset160': 1.68, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y' ann. mean {'mrinasset160': 3.717, 'mrwrings4': 0.152} ann. std {'mrinasset160': 7.085, 'mrwrings4': 1.537} ann. SR {'mrinasset160': 0.52, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.135, 'mrwrings4': 0.036} ann. std {'mrinasset160': 6.641, 'mrwrings4': 0.897} ann. SR {'mrinasset160': -0.02, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y' ann. mean {"mrinasset160': -3.355, 'mrwrings4': -1.173} ann. std {"mrinasset160': 10.925, 'mrwrings4': 2.632} ann. SR {"mrinasset160': -0.31, 'mrwrings4': -0.45}

