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| Experiment 1 | | | | | | | | |
| TOP# | PSO-RLSE | | ABCO-RLSE | | PSO-RLSE\* | | ABCO-RLSE\* | |
|  | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits |
| 1 | 0.048 | 1122.53 | 0.016 | 1112.80 | 0.029 | 231.52 | 0.100 | 187.81 |
| 2 | 0.047 | 1122.53 | 0.021 | 1067.94 | 0.028 | 231.52 | 0.099 | 187.81 |
| 3 | 0.046 | 1122.53 | 0.020 | 1060.78 | 0.027 | 231.52 | 0.098 | 187.81 |
| 4 | 0.045 | 1122.53 | 0.019 | 1060.78 | 0.026 | 231.52 | 0.097 | 187.81 |
| 5 | 0.100 | 1115.83 | 0.022 | 1045.67 | 0.025 | 231.52 | 0.096 | 187.81 |
| 6 | 0.099 | 1115.83 | 0.011 | 1037.69 | 0.024 | 231.52 | 0.095 | 187.81 |
| 7 | 0.098 | 1115.83 | 0.015 | 984.83 | 0.023 | 231.52 | 0.094 | 187.81 |
| 8 | 0.097 | 1115.83 | 0.012 | 972.39 | 0.022 | 231.52 | 0.093 | 187.81 |
| 9 | 0.096 | 1115.83 | 0.014 | 958.63 | 0.021 | 231.52 | 0.092 | 187.81 |
| 10 | 0.095 | 1115.83 | 0.023 | 952.84 | 0.020 | 231.52 | 0.091 | 187.81 |
| 11 | 0.094 | 1115.83 | 0.029 | 943.55 | 0.100 | 205.99 | 0.090 | 187.81 |
| 12 | 0.093 | 1115.83 | 0.031 | 925.30 | 0.099 | 205.99 | 0.089 | 187.81 |
| 13 | 0.092 | 1115.83 | 0.030 | 925.30 | 0.098 | 205.99 | 0.088 | 187.81 |
| 14 | 0.091 | 1115.83 | 0.013 | 911.23 | 0.097 | 205.99 | 0.087 | 187.81 |
| 15 | 0.090 | 1115.83 | 0.018 | 867 | 0.096 | 205.99 | 0.086 | 187.81 |
| 16 | 0.089 | 1115.83 | 0.017 | 830.91 | 0.095 | 205.99 | 0.085 | 187.81 |
| 17 | 0.088 | 1115.83 | 0.028 | 815.58 | 0.094 | 205.99 | 0.084 | 187.81 |
| 18 | 0.087 | 1115.83 | 0.027 | 790.05 | 0.093 | 205.99 | 0.083 | 187.81 |
| 19 | 0.086 | 1115.83 | 0.026 | 790.05 | 0.092 | 205.99 | 0.082 | 187.81 |
| 20 | 0.085 | 1115.83 | 0.024 | 776.22 | 0.091 | 205.99 | 0.081 | 187.81 |

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| Experiment 2 | | | | | | | | |
| TOP# | PSO-RLSE | | ABCO-RLSE | | PSO-RLSE\* | | ABCO-RLSE\* | |
|  | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits |
| 1 | 0.035 | 2700.42 | 0.100 | 2062.39 | 0.016 | 804.53 | 0.020 | 1206.17 |
| 2 | 0.031 | 2653.95 | 0.099 | 2062.39 | 0.015 | 804.53 | 0.019 | 1206.17 |
| 3 | 0.030 | 2653.95 | 0.098 | 2062.39 | 0.014 | 804.53 | 0.018 | 1099.44 |
| 4 | 0.027 | 2641.95 | 0.097 | 2062.39 | 0.013 | 804.53 | 0.017 | 1099.44 |
| 5 | 0.026 | 2641.95 | 0.096 | 2062.39 | 0.012 | 804.53 | 0.025 | 1020.06 |
| 6 | 0.033 | 2635.91 | 0.095 | 2062.39 | 0.011 | 804.53 | 0.024 | 1020.06 |
| 7 | 0.032 | 2610.73 | 0.094 | 2062.39 | 0.010 | 804.53 | 0.023 | 1020.06 |
| 8 | 0.037 | 2530.42 | 0.093 | 2062.39 | 0.009 | 804.53 | 0.022 | 1020.06 |
| 9 | 0.036 | 2530.42 | 0.092 | 2062.39 | 0.100 | 800.26 | 0.021 | 1020.06 |
| 10 | 0.034 | 2530.42 | 0.091 | 2062.39 | 0.099 | 800.26 | 0.100 | 895.19 |
| 11 | 0.029 | 2515.35 | 0.090 | 2062.39 | 0.098 | 800.26 | 0.099 | 895.19 |
| 12 | 0.028 | 2515.35 | 0.089 | 2062.39 | 0.097 | 800.26 | 0.098 | 895.19 |
| 13 | 0.025 | 2421.66 | 0.088 | 2062.39 | 0.096 | 800.26 | 0.097 | 895.19 |
| 14 | 0.051 | 2368.82 | 0.087 | 2062.39 | 0.095 | 800.26 | 0.096 | 895.19 |
| 15 | 0.100 | 2341.24 | 0.086 | 2062.39 | 0.094 | 800.26 | 0.095 | 895.19 |
| 16 | 0.099 | 2341.24 | 0.085 | 2062.39 | 0.093 | 800.26 | 0.094 | 895.19 |
| 17 | 0.098 | 2341.24 | 0.084 | 2062.39 | 0.092 | 800.26 | 0.093 | 895.19 |
| 18 | 0.097 | 2341.24 | 0.083 | 2062.39 | 0.091 | 800.26 | 0.092 | 895.19 |
| 19 | 0.096 | 2341.24 | 0.082 | 2062.39 | 0.090 | 800.26 | 0.091 | 895.19 |
| 20 | 0.095 | 2341.24 | 0.081 | 2062.39 | 0.089 | 800.26 | 0.090 | 895.19 |

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| Experiment 3 | | | | | | | | |
| TOP# | PSO-RLSE | | ABCO-RLSE | | PSO-RLSE\* | | ABCO-RLSE\* | |
|  | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits | 𝜑 | profits |
| 1 | 0.021 | 2894.39 | 0.033 | 4190.93 | 0.100 | 740.06 | 0.100 | 962.20 |
| 2 | 0.022 | 2849.33 | 0.036 | 4126.28 | 0.099 | 740.06 | 0.099 | 962.20 |
| 3 | 0.020 | 2670.72 | 0.034 | 4119.62 | 0.098 | 740.06 | 0.098 | 962.20 |
| 4 | 0.023 | 2668.93 | 0.035 | 4051.07 | 0.097 | 740.06 | 0.097 | 962.20 |
| 5 | 0.024 | 2651.17 | 0.037 | 4034.56 | 0.096 | 740.06 | 0.096 | 962.20 |
| 6 | 0.017 | 2650.42 | 0.038 | 3979.07 | 0.095 | 740.06 | 0.095 | 962.20 |
| 7 | 0.018 | 2632.17 | 0.040 | 3967.51 | 0.094 | 740.06 | 0.094 | 962.20 |
| 8 | 0.043 | 2521.55 | 0.039 | 3962.82 | 0.093 | 740.06 | 0.093 | 962.20 |
| 9 | 0.016 | 2506.61 | 0.041 | 3891.92 | 0.092 | 740.06 | 0.092 | 962.20 |
| 10 | 0.025 | 2480.82 | 0.100 | 3743.88 | 0.091 | 740.06 | 0.091 | 962.20 |
| 11 | 0.038 | 2460.43 | 0.099 | 3743.88 | 0.090 | 740.06 | 0.090 | 962.20 |
| 12 | 0.044 | 2443.58 | 0.098 | 3743.88 | 0.089 | 740.06 | 0.089 | 962.20 |
| 13 | 0.045 | 2437.20 | 0.097 | 3743.88 | 0.088 | 740.06 | 0.088 | 962.20 |
| 14 | 0.100 | 2429.80 | 0.096 | 3743.88 | 0.087 | 740.06 | 0.087 | 962.20 |
| 15 | 0.099 | 2429.80 | 0.095 | 3743.88 | 0.086 | 740.06 | 0.086 | 962.20 |
| 16 | 0.098 | 2429.80 | 0.094 | 3743.88 | 0.085 | 740.06 | 0.085 | 962.20 |
| 17 | 0.097 | 2429.80 | 0.093 | 3743.88 | 0.084 | 740.06 | 0.084 | 962.20 |
| 18 | 0.096 | 2429.80 | 0.092 | 3743.88 | 0.083 | 740.06 | 0.083 | 962.20 |
| 19 | 0.095 | 2429.80 | 0.091 | 3743.88 | 0.082 | 740.06 | 0.082 | 962.20 |
| 20 | 0.094 | 2429.80 | 0.090 | 3743.88 | 0.081 | 740.06 | 0.081 | 962.20 |