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A
Sample of “Trades Report”

This report refers to an interday forecasting to the Pair Trading USIM5 x GGBR4, provided by PLSR predictor. To avoid the generation of very large reports, the experiment presents a test period of only 10 trading days, which falls between May 3^{th} 2010 and May 14^{th} 2010. Its corresponding Summary Report is shown in appendix B.

```
 ---------------------------------------------------------------------------------------------------------
|                                          Trades Report                                                  |
 ---------------------------------------------------------------------------------------------------------

 ---------------------------------------------------------------------------------------------------------
| Predictor                    = PLSR                                                                     |
| Forecasting Scheme           = Interday                                                                 |
| Trading Concerned            = Pairs Trading                                                            |
| Considered Stock(s)          = USIM5 x GGBR4                                                            |
| Training Period Begin Date   = 29/12/2008                                                               |
| Training Period End Date     = 29/04/2010                                                               |
| Validation Period Begin Date = 30/04/2010                                                               |
| Validation Period End Date   = 30/04/2010                                                               |
| Test Period Begin Date       = 03/05/2010                                                               |
| Test Period End Date         = 14/05/2010                                                               |
 ---------------------------------------------------------------------------------------------------------

 ---------------------------------------------------------------------------------------------------------
|   Date   Time  Stock TrTp     Amount      Price  BrkRat StMRat  TotRat  Cash_Befr  Cash_Blc  Cash_Aft  |
 ---------------------------------------------------------------------------------------------------------
| 03/05/10 11:46 ggbr4 C(0)  7100(100.00%)  27.87  -15.77 -68.26  -84.03  200000.00 -197961.03   2038.97 |
| 03/05/10 11:46 usim5 V(0) -3500(100.00%)  55.77  -15.77 -67.34  -83.11  200000.00  195111.89 395111.89 |
| 03/05/10 16:54 ggbr4 V(3) -7100(100.00%)  27.92  -15.77 -68.38  -84.15  197150.86  198147.85 395298.71 |
| 03/05/10 16:54 usim5 C(3)  3500(100.00%)  55.19  -15.77 -66.63  -82.40  395298.71 -193247.40 202051.31 |
| Current Date Raw Cash Balance            =    R$2030.80                                                 |
| Current Date Withholding Income Tax Cost =     -R$20.51                                                 |
| Current Date Net Cash Balance            =    R$1641.05                                                 |
| Current Date Income Tax Cost             =    -R$389.75                                                 |
| Raw Cash After This Date                 =  R$202030.80                                                 |
| Net Cash After This Date                 =  R$201641.05                                                 |
| Current Date Raw Rentability Balance     =        1.02%                                                 |
| Current Date Net Rentability Balance     =        0.82%                                                 |
| Raw Rentability After This Date          =        1.02%                                                 |
| Net Rentability After This Date          =        0.82%                                                 |
 ---------------------------------------------------------------------------------------------------------
| 04/05/10 10:37 ggbr4 C(0)  7300(100.00%)  27.38  -15.77 -68.95  -84.72  202030.80 -199958.72   2072.07 |
| 04/05/10 10:37 usim5 V(0) -3700(100.00%)  54.54  -15.77 -69.61  -85.38  202030.80  201712.62 403743.41 |
| 04/05/10 16:54 ggbr4 V(3) -7300(100.00%)  26.82  -15.77 -67.53  -83.30  203784.70  195702.70 399487.39 |
| 04/05/10 16:54 usim5 C(3)  3700(100.00%)  53.65  -15.77 -68.48  -84.25  399487.40 -198589.25 200898.14 |
| Current Date Raw Cash Balance            =   -R$1163.88                                                 |
| Current Date Withholding Income Tax Cost =     -R$31.23                                                 |
| Current Date Net Cash Balance            =    -R$906.12                                                 |
| Current Date Income Tax Cost             =       R$0.00                                                 |
| Raw Cash After This Date                 =  R$200866.91                                                 |
| Net Cash After This Date                 =  R$200734.93                                                 |
| Current Date Raw Rentability Balance     =       -0.58%                                                 |
| Current Date Net Rentability Balance     =       -0.45%                                                 |
| Raw Rentability After This Date          =        0.43%                                                 |
| Net Rentability After This Date          =        0.37%                                                 |
 ---------------------------------------------------------------------------------------------------------
```

```
| 05/05/10 10:30 ggbr4 C(0)  7600(100.00%)  26.27  -15.77 -68.87  -84.64  200866.91 -199736.64   1130.27 |
| 05/05/10 10:30 usim5 V(0) -3700(100.00%)  52.89  -15.77 -67.51  -83.28  200866.91  195609.72 396476.63 |
| 05/05/10 16:54 ggbr4 V(3) -7600(100.00%)  27.08  -15.77 -70.99  -86.76  196739.99  205721.24 402461.23 |
| 05/05/10 16:54 usim5 C(3)  3700(100.00%)  53.07  -15.77 -67.74  -83.51  402461.23 -196442.51 206018.72 |
| Current Date Raw Cash Balance           =    R$5091.96                                                 |
| Current Date Withholding Income Tax Cost =     -R$59.85                                                |
| Current Date Net Cash Balance           =    R$4121.45                                                 |
| Current Date Income Tax Cost            =    -R$970.52                                                 |
| Raw Cash After This Date                =  R$205958.88                                                 |
| Net Cash After This Date                =  R$204856.38                                                 |
| Current Date Raw Rentability Balance    =        2.53%                                                 |
| Current Date Net Rentability Balance    =        2.05%                                                 |
| Raw Rentability After This Date         =        2.98%                                                 |
| Net Rentability After This Date         =        2.43%                                                 |
 ---------------------------------------------------------------------------------------------------
| 06/05/10 15:46 ggbr4 C(0)  8200(100.00%)  24.91  -15.77 -70.46  -86.23  205958.88 -204348.23   1610.64 |
| 06/05/10 15:46 usim5 V(0) -4100(100.00%)  49.80  -15.77 -70.44  -86.21  205958.88  204093.79 410052.66 |
| 06/05/10 16:54 ggbr4 V(3) -8200(100.00%)  26.82  -15.77 -75.86  -91.63  205704.44  219832.37 425536.80 |
| 06/05/10 16:54 usim5 C(3)  4100(100.00%)  51.50  -15.77 -72.83  -88.60  425536.81 -211238.60 214298.20 |
| Current Date Raw Cash Balance           =    R$8184.49                                                 |
| Current Date Withholding Income Tax Cost =    -R$154.84                                                |
| Current Date Net Cash Balance           =    R$6671.46                                                 |
| Current Date Income Tax Cost            =   -R$1513.02                                                 |
| Raw Cash After This Date                =  R$214143.37                                                 |
| Net Cash After This Date                =  R$211527.84                                                 |
| Current Date Raw Rentability Balance    =        3.97%                                                 |
| Current Date Net Rentability Balance    =        3.26%                                                 |
| Raw Rentability After This Date         =        7.07%                                                 |
| Net Rentability After This Date         =        5.76%                                                 |
 ---------------------------------------------------------------------------------------------------
| 10/05/10 10:22 ggbr4 C(0)  7800(100.00%)  27.44  -15.77 -73.83  -89.60  214143.37 -214121.60     21.76 |
| 10/05/10 10:22 usim5 V(0) -4000(100.00%)  53.14  -15.77 -73.32  -89.09  214143.37  212470.91 426614.27 |
| 10/05/10 16:54 ggbr4 V(3) -7800(100.00%)  26.91  -15.77 -72.41  -88.18  212492.68  209809.82 422302.49 |
| 10/05/10 16:54 usim5 C(3)  4000(100.00%)  53.25  -15.77 -73.48  -89.25  422302.50 -213089.25 209213.24 |
| Current Date Raw Cash Balance           =   -R$4930.12                                                 |
| Current Date Withholding Income Tax Cost =       R$0.00                                                |
| Current Date Net Cash Balance           =   -R$3944.10                                                 |
| Current Date Income Tax Cost            =       R$0.00                                                |
| Raw Cash After This Date                =  R$209213.25                                                 |
| Net Cash After This Date                =  R$207583.74                                                 |
| Current Date Raw Rentability Balance    =       -2.30%                                                 |
| Current Date Net Rentability Balance    =       -1.86%                                                 |
| Raw Rentability After This Date         =        4.61%                                                 |
| Net Rentability After This Date         =        3.79%                                                 |
 ---------------------------------------------------------------------------------------------------
| 11/05/10 10:05 ggbr4 C(0)  7900(100.00%)  26.44  -15.77 -72.05  -87.82  209213.25 -208963.82    249.42 |
| 11/05/10 10:05 usim5 V(0) -3900(100.00%)  52.44  -15.77 -70.55  -86.32  209213.25  204429.68 413642.92 |
| 11/05/10 16:54 ggbr4 V(3) -7900(100.00%)  26.30  -15.77 -71.67  -87.44  204679.11  207682.56 412361.66 |
| 11/05/10 16:54 usim5 C(3)  3900(100.00%)  52.75  -15.77 -70.97  -86.74  412361.67 -205811.74 206549.92 |
| Current Date Raw Cash Balance           =   -R$2663.32                                                 |
| Current Date Withholding Income Tax Cost =       R$0.00                                                |
| Current Date Net Cash Balance           =   -R$2130.66                                                 |
| Current Date Income Tax Cost            =       R$0.00                                                |
| Raw Cash After This Date                =  R$206549.93                                                 |
| Net Cash After This Date                =  R$205453.09                                                 |
| Current Date Raw Rentability Balance    =       -1.27%                                                 |
| Current Date Net Rentability Balance    =       -1.03%                                                 |
| Raw Rentability After This Date         =        3.27%                                                 |
| Net Rentability After This Date         =        2.73%                                                 |
 ---------------------------------------------------------------------------------------------------
| 12/05/10 10:16 ggbr4 C(0)  7700(100.00%)  26.53  -15.77 -70.47  -86.24  206549.93 -204367.24   2182.68 |
| 12/05/10 10:16 usim5 V(0) -3800(100.00%)  53.03  -15.77 -69.52  -85.29  206549.93  201428.71 407978.63 |
| 12/05/10 16:54 ggbr4 V(3) -7700(100.00%)  26.75  -15.77 -71.05  -86.82  203611.40  205888.18 409499.57 |
| 12/05/10 16:54 usim5 C(3)  3800(100.00%)  53.07  -15.77 -69.56  -85.33  409499.58 -201751.33 207748.24 |
| Current Date Raw Cash Balance           =    R$1183.11                                                 |
| Current Date Withholding Income Tax Cost =     -R$15.21                                                |
| Current Date Net Cash Balance           =     R$958.66                                                 |
| Current Date Income Tax Cost            =    -R$224.45                                                 |
| Raw Cash After This Date                =  R$207733.04                                                 |
| Net Cash After This Date                =  R$206411.74                                                 |
| Current Date Raw Rentability Balance    =        0.57%                                                 |
| Current Date Net Rentability Balance    =        0.47%                                                 |
| Raw Rentability After This Date         =        3.87%                                                 |
| Net Rentability After This Date         =        3.21%                                                 |
 ---------------------------------------------------------------------------------------------------
| 13/05/10 12:34 ggbr4 V(0) -7700(100.00%)  26.93  -15.77 -71.53  -87.30  207733.04  207273.70 415006.73 |
| 13/05/10 12:34 usim5 C(0)  4000(100.00%)  51.80  -15.77 -71.48  -87.25  207733.04 -207287.25    445.78 |
| 13/05/10 16:54 ggbr4 C(3)  7700(100.00%)  26.52  -15.77 -70.44  -86.21  207719.49 -204290.21   3429.27 |
| 13/05/10 16:54 usim5 V(3) -4000(100.00%)  51.24  -15.77 -70.70  -86.47    3429.28  204873.53 208302.80 |
| Current Date Raw Cash Balance           =     R$539.94                                                 |
```

```
| Current Date Withholding Income Tax Cost =     -R$29.83                                                                |
| Current Date Net Cash Balance            =     R$455.82                                                                |
| Current Date Income Tax Cost             =     -R$84.12                                                                |
| Raw Cash After This Date                 =  R$208272.97                                                                |
| Net Cash After This Date                 =  R$206867.56                                                                |
| Current Date Raw Rentability Balance     =        0.26%                                                               |
| Current Date Net Rentability Balance     =        0.22%                                                               |
| Raw Rentability After This Date          =        4.14%                                                               |
| Net Rentability After This Date          =        3.43%                                                               |
 ------------------------------------------------------------------------------------------------------------------
| 14/05/10 10:50 ggbr4 C(0)  8100(100.00%)  25.65  -15.77 -71.67  -87.44  208272.97 -207852.44    420.53 |
| 14/05/10 10:50 usim5 V(0) -4100(100.00%)  50.39  -15.77 -71.27  -87.04  208272.97  206511.96 414784.93 |
| 14/05/10 16:54 ggbr4 V(3) -8100(100.00%)  25.77  -15.77 -72.01  -87.78  206932.49  208649.22 415581.71 |
| 14/05/10 16:54 usim5 C(3)  4100(100.00%)  50.20  -15.77 -70.99  -86.76  415581.71 -205906.76 209674.95 |
| Current Date Raw Cash Balance            =    -R$290.73                                                               |
| Current Date Withholding Income Tax Cost =     -R$14.02                                                              |
| Current Date Net Cash Balance            =    R$1114.68                                                               |
| Current Date Income Tax Cost             =    -R$266.38                                                               |
| Raw Cash After This Date                 =  R$207982.24                                                                |
| Net Cash After This Date                 =  R$207982.24                                                                |
| Current Date Raw Rentability Balance     =       -0.14%                                                               |
| Current Date Net Rentability Balance     =        0.54%                                                               |
| Raw Rentability After This Date          =        3.99%                                                               |
| Net Rentability After This Date          =        3.99%                                                               |
 ------------------------------------------------------------------------------------------------------------------
```

B
Sample of “Summary Report”

This report refers to an interday forecasting to the Pair Trading USIM5 x GGBR4, provided by PLSR predictor. To avoid the generation of very large reports, the experiment presents a test period of only 10 trading days, which falls between May 3^{th} 2010 and May 14^{th} 2010. Its corresponding Summary Report is shown in appendix A.

```
 ---------------------------------------------------------------------------------------------------------
|                                          Summary Report                                                 |
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 ---------------------------------------------------------------------------------------------------------
| Predictor                   = PLSR                                                                      |
| Forecasting Scheme          = Interday                                                                  |
| Trading Concerned           = Pairs Trading                                                             |
| Considered Stock(s)         = USIM5 x GGBR4                                                             |
| Training Period Begin Date  = 29/12/2008                                                                |
| Training Period End Date    = 29/04/2010                                                                |
| Validation Period Begin Date = 30/04/2010                                                               |
| Validation Period End Date  = 30/04/2010                                                                |
| Test Period Begin Date      = 03/05/2010                                                                |
| Test Period End Date        = 14/05/2010                                                                |
 ---------------------------------------------------------------------------------------------------------

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| Number of Days                                  =              10                                       |
| Maximum Number of Consecutive Gain Days         =               3                                       |
| Maximum Number of Consecutive Loss Days         =               2                                       |
| Maximum Number of Consecutive Tie Days          =               1                                       |
|                                                                                                         |
| Number of Trades                                =              36                                       |
| Trading Volume                                  =    R$7359919.00                                       |
|                                                                                                         |
| Number of Combined Trades                       =              18                                       |
| Number of Gain Combined Trades                  =               9                                       |
| Number of Loss Combined Trades                  =               9                                       |
| Number of Tie Combined Trades                   =               0                                       |
| Maximum Number of Consecutive Gain Combined Trades =            2                                       |
| Maximum Number of Consecutive Loss Combined Trades =            5                                       |
| Maximum Number of Consecutive Tie Combined Trades  =            0                                       |
| Combined Trades Cash Balance Average            =        R$554.80                                       |
| Gain Combined Trades Cash Balance Average       =       R$3616.65                                       |
| Loss Combined Trades Cash Balance Average       =      -R$2507.04                                       |
| Maximum Gain Combined Trades                    =      R$15484.14                                       |
| Maximum Loss Combined Trades                    =      -R$7144.81                                       |
|                                                                                                         |
| Number of Pairs Trading                         =               9                                       |
| Number of Gain Pairs Trading                    =               6                                       |
| Number of Loss Pairs Trading                    =               3                                       |
| Number of Tie Pairs Trading                     =               0                                       |
| Maximum Number of Consecutive Gain Pairs Trading   =            2                                       |
| Maximum Number of Consecutive Loss Pairs Trading   =            2                                       |
| Maximum Number of Consecutive Tie Pairs Trading    =            0                                       |
| Pairs Trading Cash Balance Average              =       R$1109.60                                       |
| Gain Pairs Trading Cash Balance Average         =       R$3118.75                                       |
| Loss Pairs Trading Cash Balance Average         =      -R$2908.70                                       |
| Maximum Gain Pairs Trading                      =       R$8339.33                                       |
```

Maximum Loss Pairs Trading	=	-R$4930.12
Absolute Brokerage Tax Cost	=	-R$567.72
Custody Rate	=	R$6.90
Total Brokerage Tax Costs	=	-R$574.62
Trading Tax Cost	=	-R$2097.42
Liquidation Tax Cost	=	-R$441.43
Total Stock Market Tax Costs	=	-R$2538.85
Withholding Income Tax Cost	=	-R$325.50
Daytrade Income Tax Cost	=	-R$1997.29
Total Income Tax Costs	=	-R$1997.29
Total Tax Costs	=	-R$5110.76
Final Cash Disregarding Income Tax	=	R$209979.53
Raw Final Cash	=	R$207982.24
Net Final Cash	=	R$207982.24
Rentability Disregarding Income Tax	=	4.99%
Raw Rentability	=	3.99%
Net Rentability	=	3.99%
Annual Rentability Disregarding Income Tax	=	233.89%
Raw Annual Rentability	=	163.53%
Net Annual Rentability	=	163.53%
Maximum Drawdown	=	2.87%

Raw Cash Balance	=	R$2030.80	-R$1163.88	R$5091.96	R$8184.49	R$0.00
		-R$4930.12	-R$2663.32	R$1183.11	R$539.94	-R$283.83
Withholding Income Tax Cost	=	-R$20.51	-R$31.23	-R$59.85	-R$154.84	R$0.00
		R$0.00	R$0.00	-R$15.21	-R$29.83	-R$14.02
Net Cash Balance	=	R$1641.05	-R$906.12	R$4121.45	R$6671.46	R$0.00
		-R$3944.10	-R$2130.66	R$958.66	R$455.82	R$1121.58
Income Tax Cost	=	-R$389.75	R$257.76	-R$970.52	-R$1513.02	R$0.00
		R$986.02	R$532.66	-R$224.45	-R$84.12	-R$266.38
Raw Cash Evolution	=	R$202030.80	R$200866.91	R$205958.88	R$214143.37	R$214143.37
		R$209213.25	R$206549.93	R$207733.04	R$208272.97	R$207989.14
Raw Rentability Balance	=	1.02%	-0.58%	2.53%	3.97%	0.00%
		-2.30%	-1.27%	0.57%	0.26%	-0.14%
Raw Rentability Evolution	=	1.02%	0.43%	2.98%	7.07%	7.07%
		4.61%	3.27%	3.87%	4.14%	3.99%
Net Cash Evolution	=	R$201641.05	R$200734.93	R$204856.38	R$211527.84	R$211527.84
		R$207583.74	R$205453.09	R$206411.74	R$206867.56	R$207989.14
Net Rentability Balance	=	0.82%	-0.45%	2.05%	3.26%	0.00%
		-1.86%	-1.03%	0.47%	0.22%	0.54%
Net Rentability Evolution	=	0.82%	0.37%	2.43%	5.76%	5.76%
		3.79%	2.73%	3.21%	3.43%	3.99%