

# HOMWORK 3: DUAL LISTING ARBITRAGE

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**Abstract.** In this homework we study pure arbitrage as a way of making risk-free profits by trading some volume between two markets. Even though the profits per trade are low compared to the amount of cash involved, it is still possible to make a significant profit over time.

## 1 Trading robot

### 1.1 Algorithm

### 1.2 Implementation

## 2 Results

#	CHI (Buy)	CHI (Sell)	EUR (Buy)	EUR (Sell)	Profit
1	-18501.97	35695.85	-35691.16	18504.40	7.12
2	-23826.95	5345.29	-5344.59	23830.07	3.82
3	-11087.21	2813.76	-2813.39	11088.67	1.83
4	-3903.03	22975.02	-22972.01	3903.54	3.52
5	-25475.56	9780.81	-9779.53	25478.89	4.61

#	CHI (Buy)	CHI (Sell)	EUR (Buy)	EUR (Sell)	Pos.
1	243	-469	469	-243	0
2	312	-70	70	-312	0
3	146	-37	37	-146	0
4	51	-301	301	-51	0
5	333	-128	128	-333	0

## References

- [1] P. Wilmott et al, *The Mathematics of Financial Derivatives*, 1995.