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Rational Choice Function Implementation for the German Stock Market Analysis

Joseph E. Mullet ¹

Abstract.

A concept of a *kernel* ² was re-visited for stock market analysis using monotone choice functions. We focused on indicators of purchases and sales on the German stock market, which have an advantage over others, giving a higher dynamics of changes for each such a specific change, which was called significance level.

Keywords: indicators, credentials, monotonic, system, kernel

JEL Classification: C13, C52, C82

1. Introduction.

In the analysis of data, two opposing approaches can be distinguished: from subjective to objective knowledge and in the opposite direction from objective to subjective. In the first approach, a specialist, such as a biologist, physician, astronomer, ... who has knowledge in his field, uses data visualization to make objective statements about the obtained estimates of experimental data, observations, etc. With this approach from subjective assessment to objective assessment requires knowledge of the distribution of judgments about the object being examined, which is not always the case.

The second approach from objective to subjective assessment at first glance seems contradictory. It seems that specialized knowledge is also required. However, it is very possible to do without specific knowledge as well as knowledge of the distribution of numerical parameters. This method or approach can be called a blind method of

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² Mullet, J. E., a) 1971, "ON A MAXIMUM PRINCIPLE FOR CERTAIN FUNCTIONS OF SETS," in: *Notes on Data Processing and Functional Analysis, Proceedings of the Tallinn Polytechnic Institute* (in Russian), Series A, No. 313, Tallinn Polytechnic Institute, pp. 37-44; b) 1976, "EXTREMAL SUBSYSTEMS OF MONOTONIC SYSTEMS, 1," *Avtom, Telemekh.*, No. 5, pp. 130 –139.

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data analysis. The only thing the data explorer uses in the blind method is that one number is larger/smaller than the other. If at the same time it is possible to reach common sense, the well-known philosophical principle "OR" - "Ockham's razor" comes into force, that the method, which requires fewer assumptions of reality can be considered the most reliable.

2. Significance Procedure

Here, we will only go into few details of our method for analyzing shared data. Let us define a set W , $|W| = n$, of n indicators p_i , $i = \overline{1, n}$. In particular, let a sample denoted by H , match all significant indicators $p_i \in H$. We can further define a totality of sets $\{H\}$ of all 2^n samples $H \subseteq W$. In such a case, a sample $W - H = W \setminus H$ denoted by $\overline{H} = W - H$ comprises of all insignificant indicators $p_i \in \overline{H}$. Let credentials $\pi(p_i, H) = p_i \cdot |H|$ estimate the significance of $p_i \in H$, whereby $\pi(p_i, \overline{H}) = p_i \cdot |\overline{H}|$ denotes the insignificance of $p_i \in \overline{H}$.

The procedure for finding significant indicators is easy to set up. First, all the indicators p_i , $i = \overline{1, n}$, are sorted in descending order, constituting the order $\langle p_j \rangle$, $j = \overline{1, n}$, and then a sequence of credentials π_j is constructed as $\pi_j = \langle p_j \rangle \cdot j$, $j = \overline{1, n}$. The sequence π_j is called defining.

The indicators $\langle p_j \rangle$, $j = \overline{1, n}$, visualized in contrast to original indicators p_i , $i = \overline{1, n}$, are necessary descending. The credentials π_j , $j = \overline{1, n}$, are single peaked, where the peak denotes the kernel H^* of Mulla's monotone system: $H^* = \arg \max_{H \subseteq W} \min_{p_i \in H} \pi(p_i, H)$, Mulla, 1995, Mathematical Social Sciences 30, pp. 195-205, <https://www.sciencedirect.com/science/article/abs/pii/016548969500780P>. Let $\arg \max_{j=\overline{1, n}} \pi_j$ denote the peak indicator p_k^* where the local maximum is reached. This value p_k^* will be called the **significance level** of indicators p_i , $i = \overline{1, n}$.

3. Formal Properties

It seems that the theory of choice, Arrow 1959, is better explained not by my own words, but by the words of specialists in this field. Below I shell slightly modify the nomenclature for my own purpose.

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“These notes are based on lectures I (DECISION THEORY, Tomasz Strzalecki, TS, included by JM) gave at Harvard in 2010{17 and also those I gave when visiting the Cowles Foundation at Yale in 2012...”

...Models in Economics are micro founded, which means that at the bottom of every model there is an economic agent (often many of them) choosing an action from an opportunity set. This set, often called the budget set or a menu, represents the various actions that are available to the agent. But which action will the agent choose? By far the most popular theory is that the agent will choose the alternative with the highest utility. In the most basic version of the theory the utility function is an as-if concept, which means that we don't claim it exists in any material sense nor is it necessarily related to the agent's well being, emotions, or biology. It is just a mathematical construct that helps the analyst make sense of observed choices: the agent behaves as if he maximizes a utility function. We don't care how the agent manages to maximize the utility (it may be a hard mathematical problem) because utility is just a language of description and it is not taken literally.”...

...Let X be a set of alternatives that the agent is choosing between. They can be either immediate “payoffs” (for example different candy bars of which your diet lets you eat only one) or more structured objects (such as retirement plans). There are three main “languages” that help us describe choice:”

The first item is the most important for us.

“A choice function, TS. *The analyst observes which element the agent chooses from every nonempty set $A \subseteq X$. Let $c(A)$ denote that element.”*

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We use an uppercase letter for the selection function $C(A)$, which emphasizes that the user can select for analysis not a single element but a set $C(A)$ to decide the set of best alternatives selected from A . In fact, the set A selected for choice action will be considered as an area in the EXCEL spreadsheets — as cells in a column, a row or tables that can be selected using the “pasted” option. The choice function $C(A)$, following the basic procedure described above, was programmed using the Cntrl-s macro (available on request).

As it was pointed (Aizerman and Malishevski, 1981), there are some postulates, which we will note in connection with our rational choice procedure.

- *Independence with respect to dropping rejected options (or, for brevity, elimination of options), Postulate 5 of Chernoff, 1954, or Axiom 2 (Jamison and Lau, 1973):*
if it follows from $C(X) \subseteq X' \subseteq X$ that $C(X') = C(X)$.
- *Succession (which is the same as Postulate 4 of Chernoff, 1954, or condition α of Sen or the axiom C2 of Arrow-Uzawa:*
if it follows from $X' \subseteq X$ that $C(X') \supseteq C(X) \cap X'$.
- *Strict succession or constant residual choice (it is the same as postulate 6 of Chernoff, and one of the forms of the "weak axiom of revealed preference" of Samuelson, , i.e., the axiom C4 of Arrow, 1959):*
if it follows from $X' \subseteq X$ and $X' \cap C(X) \neq \emptyset$ that $C(X') = C(X) \cap X'$.

We must emphasize in this connection that in literature the set X' designated for choice is not an arbitrary subset X' of X but a set X' , where some the best alternatives in $C(X)$ have been dropped (unavailable for some reasons).

One can check the correctness of the dependency postulate in EXCEL. If the selected region is a column or row, the standard tools for changing the order of rows and columns in EXCEL allow you to transfer the result $C(A)$ to a continuous region, which, in turn, allows you to check this for any selected region of columns or rows. i.e. for $X' \subseteq X$, $C(X') = C(X)$, takes place. Checking the alternative postulate of independence will be an overwhelming task if the selected area is a table. Indeed, the fact is that the cells selected with Cntrl-s will be placed in different places in the table. It will be difficult to select a “rectangle” outside this places $C(X')$ that contains all the cells of interest. However, in some situations this is possible.

On the other hand, the postulates of *Succession* and *Strict Succession* in our rational choice procedure are only partially true. Imagine the following pedagogical situation in a restaurant with a wine list. The guest selects from the list of wines those that are best suited for the guest. But when accepting the order, the waiter explains that some of the most expensive or cheapest wines are not available. It may happen that the inaccessibility of the most expensive wines on the list will prompt the guest to expand the selection list, including some cheap wines that already have been or not on the guest best list. This actually confirms the postulate of *Succession* or *Strict Succession*. However, the emptiness of the store of some cheap wines on the list will prompt the guest to abandon some of the cheap wines still available in favor of expensive wines. These were the cases that we observed using our Cntrl-s rational selection procedure in the EXCEL table.

Literature cited

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3. Chernoff, H., 1954, "Rational selection of decision functions," *Econometrica*, 22, No. 3, 422-443.
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Appendix. German Stock Market Example

Some comments are necessary in order to explain the implementation of the aforementioned “procedure” for the analysis of the dynamics of the stock exchange. The stock exchange monitoring spreadsheet consists of 620 Germany companies. Some columns show relative $\pm\%$ and absolute increase / decrease in stock prices, last purchase, sale, etc. As you can see, some cells differ from others in certain patterns and frames. These highlighted patterns and frames are the result of using the macro — Cntrl-s. Cntrl-s means, as said, that an analysis of the **significance levels** of the negative / positive values of the stock indicators dynamic has been conducted. Using the macro in columns, rows, or selected (“*pasted*”) areas of the spreadsheet in their entirety may consist of negative / positive numbers distributed throughout the areas without any special order for negative or positive numbers. However, the standard EXCEL data sorting options allow you to sort selected areas in ascending or descending order depending on the specified columns or rows. Thus, having, for example, negative values scattered across a spreadsheet in different cells, these cells can be redistributed together into “continuous areas” of negative or positive values in the columns or row patterns to satisfy the necessary conditions. Such contiguous areas can help visualize the analysis results.

A note may be helpful. If macro Cntrl-s produces only a few selected cells or an unsatisfactory small number of special patterns and frames — in the case of very high positive or very low negative values — the same macro can be reused, now outside these sharp numerical jumps that were designated as unsatisfactory, i.e. the macro detects too small areas. In doing so columns or rows must be first reordered in ascending descending order to bring the positive / negative indicators into continuous areas. Now, reusing Cntrl-s macro in the gap, i.e., not yet patterned and framed, to add additional meaningful cells in addition to previously selected cells, can help to improve the situation.

The spreadsheet starting below, was compiled using public domain

<https://nordnetab.com/about/nordnet-overview>. One can read the following about NORDNET:

“Our target group is Nordic savers and investors. We offer products and services to both experienced investors and beginners, no matter if they have knowledge or need guidance, wish to spend hours on your investments every day or simply review your savings a few minutes a week.”

Our vision is to become the Nordic private savers’ first choice. To achieve this objective, we must always continue to challenge and innovate, keeping user-friendliness and savings benefit at the top of the agenda. Only then can we achieve the high level of customer satisfaction and brand strength required to become a leader in the Nordic region in terms of attracting new customers and producing loyal ambassadors for Nordnet.

We help people and money grow. We are passionate about creating a world-class user experience. We simplify to make it easier for people to make smart investment decisions. We share our knowledge and inspiration without any hidden agendas.

The overarching purpose of Nordnet’s operations is to democratize savings and investments. By that, we mean giving private savers access to the same information and tools as professional investors. This purpose has driven us since we started in 1996 and remains our direction to this day. In the 1990s, the idea of democratization entailed offering easily accessible and inexpensive share trading via internet, and building a fund supermarket with products from a number of different companies where savers could easily compare returns, risk and fees. During the journey, we have simplified matters and pressed down fees on, for example, pension savings, index funds and private banking services. In recent years, we have democratized the financial sector with, for example, the stock lending program. We are always on the savers’ side, and pursue issues of, for example, the right to transfer pension savings free of charge and reasonable and predictable taxation of holdings of shares and mutual funds.

Our target group is Nordic savers and investors. We offer products and services to both experienced investors and beginners, no matter if they have knowledge or need guidance, wish to spend hours on your investments every day or simply review your savings a few minutes a week.”

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
1&1 DrillischAktiengesellschaft	-1.65%	€ 0.38	€ 22.67	€ 22.65	€ 22.70	€ 23.02	€ 22.63	
11 88 0 Solutions AG	-2.16%	€ 0.03	€ 1.36	€ 1.36	€ 1.42	€ 1.36	€ 1.36	
2G Energy AG	4.46%	€ 2.80	€ 65.60	€ 65.60	€ 66.40	€ 66.40	€ 62.50	
3M Co.	0.43%	€ 0.58	€ 136.08	€ 134.86	€ 136.08	€ 136.08	€ 134.18	
3U Holding AG	2.56%	€ 0.04	€ 1.60	€ 1.58	€ 1.64	€ 1.63	€ 1.58	
4 SC AG	-0.60%	€ 0.01	€ 1.67	€ 1.63	€ 1.67	€ 1.69	€ 1.67	
4basebio AG	-1.97%	€ 0.04	€ 1.99	€ 1.99	€ 2.00	€ 2.00	€ 1.97	
7C Solarparken AG	-1.37%	€ 0.05	€ 3.59	€ 3.58	€ 3.62	€ 3.62	€ 3.56	
A.S. Creation Tapeten AG	0.00%	€ 0.00	€ 14.00	€ 13.90	€ 14.20	€ 14.00	€ 14.00	
AAP Implantate AG	-5.08%	€ 0.02	€ 0.41	€ 0.41	€ 0.45	€ 0.45	€ 0.40	
Aareal Bank AG	2.61%	€ 0.44	€ 17.31	€ 17.27	€ 17.31	€ 17.36	€ 16.95	
Abbott Laboratories	-0.23%	€ 0.18	€ 78.49	€ 78.43	€ 79.54	€ 79.98	€ 78.49	
AbbVie Inc.	-0.70%	€ 0.60	€ 85.00	€ 85.00	€ 86.40	€ 86.40	€ 85.00	
ABO Wind AG	-0.93%	€ 0.20	€ 21.40	€ 21.20	€ 21.40	€ 21.40	€ 21.40	
Accell Group	1.37%	€ 0.30	€ 22.15	€ 21.70	€ 22.00	€ 22.15	€ 22.15	
Activision Blizzard, Inc	1.00%	€ 0.68	€ 68.37	€ 67.58	€ 68.23	€ 68.37	€ 67.11	
Ad Pepper Media Intl Nv	1.29%	€ 0.04	€ 3.14	€ 3.04	€ 3.12	€ 3.14	€ 3.12	
Adesso SE	0.00%	€ 0.00	€ 54.80	€ 54.80	€ 55.00	€ 55.20	€ 54.40	
Adidas AG	-0.43%	€ 1.00	€ 232.00	€ 231.80	€ 231.90	€ 235.10	€ 230.10	
Adler Modemaerkte AG	-1.64%	€ 0.04	€ 2.40	€ 2.40	€ 2.44	€ 2.48	€ 2.40	
ADLER Real Estate AG	0.00%	€ 0.00	€ 12.64	€ 12.62	€ 12.66	€ 12.86	€ 12.60	
ADO Properties SA	-0.16%	€ 0.04	€ 24.54	€ 24.54	€ 24.58	€ 24.82	€ 24.28	
Adobe Inc.	0.12%	€ 0.45	€ 382.60	€ 379.20	€ 382.80	€ 383.70	€ 379.05	

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Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
ADVA Optical Networking SE	1.85%	€ 0.10	€ 5.52	€ 5.55	€ 5.58	€ 5.62	€ 5.47
Advanced Blockchain AG	-3.27%	€ 0.10	€ 2.96	€ 2.84	€ 3.02	€ 2.96	€ 2.80
Advanced Micro Devices, Inc.	-2.67%	€ 1.22	€ 44.47	€ 44.48	€ 44.65	€ 44.90	€ 44.03
ADYEN N.V. EO-,01	1.71%	€ 22.00	€ 1,310.50	€ 1,312.00	€ 1,319.50	€ 1,327.50	€ 1,306.50
Aegon N. V.	0.00%	€ 0.00	€ 2.60	€ 2.58	€ 2.64	€ 2.70	€ 2.60
Airbus SE	1.63%	€ 1.01	€ 62.81	€ 62.74	€ 62.81	€ 63.95	€ 60.21
AIXTRON SE	-1.60%	€ 0.17	€ 10.12	€ 10.10	€ 10.13	€ 10.40	€ 10.09
Akasol AG	-1.36%	€ 0.54	€ 39.29	€ 38.89	€ 39.58	€ 40.39	€ 39.11
Aladdin BlockchainTechnlogies	-4.32%	€ 0.06	€ 1.33	€ 1.29	€ 1.37	€ 1.33	€ 1.33
Alcoa Corporation	-3.95%	€ 0.39	€ 9.58	€ 9.58	€ 9.86	€ 9.63	€ 9.55
Alibaba Group Holding Limited	-0.21%	€ 0.40	€ 192.00	€ 191.40	€ 192.20	€ 193.00	€ 191.00
All for One Group AG	0.00%	€ 0.00	€ 46.00	€ 45.70	€ 46.00	€ 47.00	€ 45.60
Allgeier SE	1.22%	€ 0.40	€ 33.20	€ 33.10	€ 33.30	€ 33.30	€ 32.80
Allianz SE	0.34%	€ 0.60	€ 178.60	€ 178.58	€ 178.62	€ 179.94	€ 176.84
Alphabet Inc. - A	-2.93%	€ 36.40	€ 1,206.80	€ 1,207.00	€ 1,210.20	€ 1,219.60	€ 1,192.20
Alphabet Inc. - C Capital Stock	-2.88%	€ 35.80	€ 1,208.40	€ 1,204.60	€ 1,207.80	€ 1,222.00	€ 1,203.60
alstria office REIT-AG	-0.37%	€ 0.05	€ 13.47	€ 13.46	€ 13.48	€ 13.61	€ 13.36
Altria Group, Inc.	-1.73%	€ 0.60	€ 34.18	€ 34.02	€ 34.51	€ 34.56	€ 34.02
AlzChem Group AG	2.05%	€ 0.40	€ 19.90	€ 19.60	€ 19.95	€ 19.90	€ 19.40
Amadeus Fire AG	0.74%	€ 0.80	€ 109.60	€ 109.60	€ 110.00	€ 110.60	€ 107.00
American Airlines Group, Inc.	-1.59%	€ 0.18	€ 10.89	€ 10.84	€ 10.99	€ 11.00	€ 10.50
American Express Company	-0.32%	€ 0.27	€ 82.89	€ 82.89	€ 84.03	€ 84.39	€ 82.00
American WW Company, Inc.	-1.57%	€ 1.74	€ 109.00	€ 109.02	€ 110.98	€ 109.00	€ 109.00

Significance Analysis

	Negative significance level →	-1.57%	€ 34.60					
	Positive significance level →	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Amgen Inc.	-0.84%	€ 1.75	€ 206.95	€ 206.65	€ 207.50	€ 206.95	€ 206.95	
ams AG	6.89%	€ 0.87	€ 13.49	€ 13.38	€ 13.49	€ 13.94	€ 13.44	
Anglo American PLC	-0.12%	€ 0.03	€ 20.47	€ 20.39	€ 20.51	€ 20.47	€ 20.20	
Anheuser-Busch InBev SA/NV	-0.53%	€ 0.23	€ 43.04	€ 43.06	€ 43.14	€ 43.04	€ 42.40	
ArcelorMittal SA	1.38%	€ 0.13	€ 9.16	€ 9.16	€ 9.17	€ 9.20	€ 8.92	
Aroundtown SA	0.23%	€ 0.01	€ 5.13	€ 5.12	€ 5.13	€ 5.22	€ 5.04	
Artec Technologies AG	2.30%	€ 0.08	€ 3.56	€ 3.36	€ 3.48	€ 3.56	€ 3.56	
Artnet AG	5.00%	€ 0.22	€ 4.62	€ 4.40	€ 4.60	€ 4.62	€ 4.40	
ASML Holding N.V. - NY Shares	-0.61%	€ 2.00	€ 324.00	€ 322.00	€ 326.00	€ 324.00	€ 318.00	
Assicurazioni Generali SpA	-0.30%	€ 0.04	€ 13.24	€ 13.22	€ 13.24	€ 13.34	€ 13.23	
AstraZeneca	0.74%	€ 0.70	€ 94.66	€ 94.77	€ 94.94	€ 95.10	€ 94.45	
AT & S Austria Techn. Sys. AG	-2.15%	€ 0.34	€ 15.48	€ 15.44	€ 15.52	€ 15.96	€ 15.26	
AT&T Inc.	-0.12%	€ 0.03	€ 26.05	€ 25.98	€ 26.05	€ 26.31	€ 25.91	
Atoss Software AG	-1.48%	€ 1.50	€ 100.00	€ 100.00	€ 101.50	€ 104.50	€ 100.00	
AUDI AG	-0.63%	€ 10.00	€ 1,570.00	€ 1,570.00	€ 1,580.00	€ 1,570.00	€ 1,570.00	
Aumann AG	-0.33%	€ 0.04	€ 12.12	€ 12.08	€ 12.16	€ 12.34	€ 11.90	
AURELIUS	1.13%	€ 0.16	€ 14.34	€ 14.34	€ 14.41	€ 14.58	€ 14.16	
Aurubis AG	0.67%	€ 0.36	€ 53.86	€ 53.88	€ 53.90	€ 54.04	€ 53.18	
Aves One AG	1.14%	€ 0.10	€ 8.85	€ 8.70	€ 8.85	€ 8.85	€ 8.80	
BAE Systems PLC	-0.26%	€ 0.01	€ 5.38	€ 5.35	€ 5.39	€ 5.38	€ 5.38	
Banco Santander SA	0.45%	€ 0.01	€ 2.14	€ 2.13	€ 2.14	€ 2.14	€ 2.09	
Bank of America Corporation	-0.98%	€ 0.21	€ 20.64	€ 20.66	€ 20.76	€ 20.77	€ 20.52	
Barclays PLC	0.74%	€ 0.01	€ 1.23	€ 1.23	€ 1.23	€ 1.23	€ 1.23	

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Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Barrick Gold Corp.	0.79%	€ 0.18	€ 22.90	€ 22.91	€ 22.93	€ 23.14	€ 22.86
Basf SE	0.95%	€ 0.47	€ 49.16	€ 49.15	€ 49.16	€ 49.32	€ 48.49
Basf SE	-0.81%	€ 0.10	€ 12.20	€ 12.10	€ 12.40	€ 12.20	€ 12.20
Basler AG	-0.35%	€ 0.20	€ 56.80	€ 56.80	€ 57.20	€ 57.40	€ 56.40
Bastei Luebbe AG	-0.52%	€ 0.01	€ 1.90	€ 1.87	€ 1.90	€ 1.90	€ 1.90
Bauer AG.	-1.25%	€ 0.12	€ 9.48	€ 9.47	€ 9.52	€ 9.61	€ 9.46
Baumot Group AG	-1.44%	€ 0.02	€ 1.03	€ 1.03	€ 1.05	€ 1.05	€ 1.03
Bayer AG	-0.37%	€ 0.25	€ 66.54	€ 66.52	€ 66.54	€ 66.87	€ 65.70
Bayer AG	0.60%	€ 0.10	€ 16.70	€ 16.50	€ 16.70	€ 16.70	€ 16.50
Bayerische Motoren Werke AG	0.65%	€ 0.36	€ 56.13	€ 56.11	€ 56.13	€ 56.71	€ 55.34
Bayerische Motoren Werke EUR 1	-0.05%	€ 0.02	€ 42.66	€ 42.58	€ 42.66	€ 43.40	€ 42.14
Baywa AG	-0.70%	€ 0.20	€ 28.30	€ 28.10	€ 28.30	€ 28.75	€ 28.30
BB Biotech AG	-0.91%	€ 0.60	€ 65.60	€ 65.60	€ 65.90	€ 66.40	€ 65.20
Bechtle AG	0.91%	€ 1.40	€ 155.10	€ 155.00	€ 155.20	€ 156.20	€ 152.10
Befesa S.A.	1.34%	€ 0.45	€ 34.10	€ 34.05	€ 34.20	€ 34.10	€ 33.45
Beiersdorf AG	-1.76%	€ 1.78	€ 99.62	€ 99.60	€ 99.64	€ 100.80	€ 99.14
Berentzen-Gruppe AG	0.65%	€ 0.04	€ 6.20	€ 6.12	€ 6.20	€ 6.22	€ 6.20
Berkshire Hathaway Inc. New	-0.38%	€ 0.60	€ 156.50	€ 156.26	€ 156.76	€ 156.88	€ 155.76
Bertrandt AG	2.33%	€ 0.80	€ 35.10	€ 34.95	€ 35.20	€ 35.90	€ 34.20
bet-at-home.com AG	0.00%	€ 0.00	€ 38.05	€ 37.95	€ 38.10	€ 38.20	€ 37.25
Beyond Meat, Inc. - Common stock	-4.75%	€ 6.08	€ 122.02	€ 122.00	€ 123.04	€ 125.50	€ 122.02
BHP Group Plc	-0.76%	€ 0.14	€ 17.90	€ 17.93	€ 17.96	€ 18.04	€ 17.80
Bijou Brigitte Mod. Access. AG	0.35%	€ 0.10	€ 28.50	€ 28.50	€ 29.00	€ 28.50	€ 28.10

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Bilfinger SE	1.20%	€ 0.19	€ 16.03	€ 16.00	€ 16.06	€ 16.23	€ 15.75	
Biofrontera AG	0.33%	€ 0.01	€ 3.00	€ 2.97	€ 3.00	€ 3.00	€ 2.99	
Biogen Inc.	-0.99%	€ 2.30	€ 230.00	€ 229.00	€ 232.15	€ 231.70	€ 229.15	
Biotest AG	2.75%	€ 0.60	€ 22.40	€ 22.20	€ 22.60	€ 22.60	€ 22.40	
Biotest AG	-0.50%	€ 0.10	€ 20.10	€ 20.10	€ 20.20	€ 20.20	€ 20.00	
Bitcoin Group SE	0.41%	€ 0.10	€ 24.60	€ 24.60	€ 24.75	€ 25.40	€ 24.40	
Black Pearl Digital AG	-4.38%	€ 0.14	€ 3.06	€ 3.00	€ 3.24	€ 3.08	€ 3.06	
BlackRock, Inc.	-1.59%	€ 7.60	€ 469.20	€ 471.25	€ 481.45	€ 469.20	€ 469.20	
Blue Cap AG	-4.35%	€ 0.80	€ 17.60	€ 17.60	€ 17.90	€ 18.50	€ 17.60	
BNP Paribas SA	1.31%	€ 0.45	€ 34.73	€ 34.76	€ 34.79	€ 34.73	€ 34.23	
Boeing Company (The)	2.85%	€ 4.32	€ 155.94	€ 155.62	€ 155.92	€ 156.68	€ 151.88	
Bombardier Inc.	-7.59%	€ 0.02	€ 0.29	€ 0.29	€ 0.29	€ 0.29	€ 0.29	
Booking Holdings Inc.	-2.48%	€ 34.60	€ 1,359.00	€ 1,350.00	€ 1,361.40	€ 1,362.00	€ 1,335.20	
Borussia Dortmund KGAA	1.08%	€ 0.07	€ 6.07	€ 6.06	€ 6.07	€ 6.09	€ 5.92	
BP (dt.Zert.)	1.75%	€ 0.06	€ 3.48	€ 3.43	€ 3.53	€ 3.51	€ 3.38	
BP PLC	1.24%	€ 0.04	€ 3.44	€ 3.44	€ 34.44	€ 34.42	€ 33.67	
BRAIN AG (Biotechn. Res.)	-3.12%	€ 0.26	€ 8.08	€ 8.04	€ 8.08	€ 8.40	€ 8.04	
Brenntag AG	0.41%	€ 0.19	€ 46.32	€ 46.32	€ 46.34	€ 46.57	€ 45.84	
Bristol-Myers Squibb Company	0.12%	€ 0.06	€ 50.92	€ 51.11	€ 51.40	€ 52.00	€ 50.73	
British American Tobacco PLC	-1.81%	€ 0.63	€ 33.91	€ 33.91	€ 33.96	€ 34.51	€ 33.91	
Broadcom Inc.	0.51%	€ 1.40	€ 275.00	€ 271.05	€ 276.85	€ 275.00	€ 275.00	
BT Group PLC	-2.43%	€ 0.03	€ 1.26	€ 1.26	€ 1.26	€ 1.28	€ 1.25	
Cadence Design Systems, Inc.	2.52%	€ 2.08	€ 84.68	€ 82.73	€ 84.53	€ 84.68	€ 84.68	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Cancom SE	-1.17%	€ 0.56	€ 47.42	€ 47.36	€ 47.42	€ 48.46	€ 47.34
Capsensixx AG	-1.18%	€ 0.10	€ 8.40	€ 8.40	€ 8.65	€ 8.60	€ 8.40
Carl Zeiss Meditec A G	-0.23%	€ 0.20	€ 87.85	€ 87.85	€ 87.95	€ 88.85	€ 87.05
Carnival PLC	-8.06%	€ 0.91	€ 10.39	€ 10.43	€ 10.53	€ 10.83	€ 10.17
Carrier Global Corporation	-8.00%	€ 1.60	€ 18.40	€ 18.40	€ 18.90	€ 18.40	€ 18.40
Ceconomy AG.	0.93%	€ 0.03	€ 3.03	€ 3.02	€ 3.04	€ 3.07	€ 2.95
Cenit AG	-2.43%	€ 0.24	€ 9.62	€ 9.54	€ 9.62	€ 9.64	€ 9.60
Centrotec SE	-0.72%	€ 0.10	€ 13.80	€ 13.78	€ 13.80	€ 13.96	€ 13.80
CenturyLink, Inc.	-0.75%	€ 0.07	€ 8.63	€ 8.43	€ 8.62	€ 8.63	€ 8.63
Ceotronics AG	3.45%	€ 0.10	€ 3.00	€ 2.86	€ 3.10	€ 3.00	€ 2.88
CEWE Stiftung & Co. KGaA	0.21%	€ 0.20	€ 95.70	€ 95.70	€ 96.00	€ 96.70	€ 94.90
CFC Industriebeteiligunge GMBH	1.72%	€ 0.02	€ 1.18	€ 1.19	€ 1.26	€ 1.18	€ 1.13
Ciena Corporation	-0.05%	€ 0.03	€ 47.32	€ 46.77	€ 48.13	€ 47.91	€ 47.32
Cisco Systems, Inc.	3.23%	€ 1.30	€ 41.37	€ 41.16	€ 41.37	€ 41.39	€ 40.91
Citigroup, Inc.	-1.62%	€ 0.73	€ 44.10	€ 44.17	€ 44.59	€ 44.10	€ 44.10
Cliq Digital AG	-2.99%	€ 0.20	€ 6.50	€ 6.40	€ 6.55	€ 6.95	€ 6.35
Co.don AG	-6.67%	€ 0.10	€ 1.40	€ 1.37	€ 1.41	€ 1.47	€ 1.40
Coca-Cola Co	-1.06%	€ 0.42	€ 39.06	€ 39.02	€ 39.07	€ 39.60	€ 38.92
Coeur Mining, Inc.	2.22%	€ 0.09	€ 4.19	€ 4.06	€ 41.70	€ 41.90	€ 41.90
Cognizant Techn. Corporation	1.92%	€ 0.94	€ 50.00	€ 48.53	€ 49.94	€ 50.00	€ 50.00
Colgate-Palmolive Company	-0.26%	€ 0.17	€ 64.15	€ 63.20	€ 64.11	€ 64.20	€ 64.15
Coloplast B	-1.07%	€ 1.50	€ 138.55	€ 137.05	€ 137.65	€ 138.55	€ 138.55
Comdirect Bank AG	-0.15%	€ 0.02	€ 13.62	€ 13.62	€ 13.70	€ 13.66	€ 13.60

Significance Analysis

	Negative significance level →	-1.57%	€ 34.60					
	Positive significance level →	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Commerzbank AG	3.09%	€ 0.12	€ 3.87	€ 3.87	€ 3.87	€ 3.89	€ 3.75	
CompuGroup Medical SE & Co	4.99%	€ 3.20	€ 67.30	€ 67.25	€ 67.35	€ 68.30	€ 64.60	
Consus Real Estate AG.	6.48%	€ 0.35	€ 5.75	€ 5.72	€ 5.78	€ 5.90	€ 5.68	
Continental AG	1.18%	€ 1.00	€ 86.04	€ 86.02	€ 86.08	€ 86.98	€ 84.18	
Coreo AG	-6.25%	€ 0.08	€ 1.20	€ 1.18	€ 1.22	€ 1.25	€ 1.20	
Corestate Capital Holding SA	1.66%	€ 0.30	€ 18.35	€ 18.32	€ 18.36	€ 18.48	€ 17.84	
Corning Incorporated	-1.04%	€ 0.24	€ 22.40	€ 22.40	€ 22.71	€ 22.72	€ 22.40	
Covestro AG	2.19%	€ 0.73	€ 34.06	€ 34.06	€ 34.08	€ 34.11	€ 33.41	
CR Capital Real Estate AG	1.85%	€ 0.60	€ 33.10	€ 33.00	€ 33.30	€ 33.20	€ 33.00	
Cree, Inc.	-1.35%	€ 0.69	€ 50.46	€ 50.64	€ 51.73	€ 50.56	€ 50.46	
CropEnergies AG	0.35%	€ 0.03	€ 8.65	€ 8.63	€ 8.67	€ 8.74	€ 8.60	
CTS Eventim AG & Co KGaA	-0.16%	€ 0.06	€ 36.94	€ 36.90	€ 36.98	€ 37.42	€ 36.60	
Curasan AG	4.55%	€ 0.00	€ 0.08	€ 0.08	€ 0.10	€ 0.08	€ 0.05	
CVS Health Corporation	2.00%	€ 1.13	€ 57.55	€ 55.78	€ 57.39	€ 57.55	€ 57.55	
Cyan AG	7.19%	€ 0.84	€ 12.46	€ 12.11	€ 12.45	€ 12.65	€ 12.15	
CytoTools AG	-0.22%	€ 0.02	€ 9.08	€ 9.08	€ 9.22	€ 9.22	€ 9.08	
Daimler AG	2.00%	€ 0.70	€ 35.71	€ 35.71	€ 35.71	€ 35.83	€ 34.95	
Data Modul AG	-0.86%	€ 0.40	€ 46.20	€ 45.80	€ 46.80	€ 46.20	€ 46.20	
Datagroup SE	1.76%	€ 0.90	€ 51.90	€ 51.60	€ 51.90	€ 52.40	€ 51.60	
Datron AG	-4.09%	€ 0.35	€ 8.20	€ 8.10	€ 8.40	€ 8.45	€ 8.20	
Deere & Co.	-1.02%	€ 1.38	€ 133.88	€ 129.98	€ 133.74	€ 133.92	€ 133.88	
Defama Deutsche Fachmarkt AG	-1.15%	€ 0.20	€ 17.20	€ 17.10	€ 17.40	€ 17.20	€ 17.20	
Delivery Hero SE	-1.88%	€ 1.74	€ 91.02	€ 91.00	€ 91.04	€ 93.70	€ 90.96	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Delticom AG	-4.23%	€ 0.11	€ 2.49	€ 2.49	€ 2.59	€ 2.54	€ 2.49
Dermapharm Holding SE	2.02%	€ 0.90	€ 45.13	€ 45.09	€ 45.13	€ 45.23	€ 44.16
Deutsche Bank AG	1.52%	€ 0.12	€ 8.26	€ 8.26	€ 8.26	€ 8.31	€ 8.06
Deutsche Beteiligungs AG	1.49%	€ 0.45	€ 30.60	€ 30.50	€ 30.75	€ 30.60	€ 30.05
Deutsche Boerse AG	-0.63%	€ 1.00	€ 158.75	€ 158.75	€ 158.80	€ 160.50	€ 158.65
Wechsel-Beteiligungs. AG	-8.10%	€ 0.09	€ 0.97	€ 0.97	€ 1.01	€ 0.97	€ 0.97
Deutsche Euroshop AG	0.89%	€ 0.11	€ 12.49	€ 12.48	€ 12.51	€ 12.56	€ 12.25
Deutsche Industrie REIT-AG	0.51%	€ 0.10	€ 19.80	€ 19.70	€ 19.90	€ 19.90	€ 19.70
Deutsche Konsum REIT-AG	0.85%	€ 0.15	€ 17.70	€ 17.55	€ 17.70	€ 17.70	€ 17.50
Deutsche Lufthansa AG	-3.49%	€ 0.31	€ 8.68	€ 8.68	€ 8.68	€ 8.97	€ 8.59
Deutsche Pfandbriefbank AG	0.63%	€ 0.04	€ 6.36	€ 6.35	€ 6.37	€ 6.44	€ 6.26
Deutsche Post AG	0.35%	€ 0.11	€ 31.51	€ 31.50	€ 31.52	€ 31.60	€ 31.27
Deutsche Rohstoff AG	2.35%	€ 0.20	€ 8.70	€ 8.50	€ 8.70	€ 8.70	€ 8.70
Deutsche Telekom AG	-2.00%	€ 0.30	€ 14.70	€ 14.40	€ 14.70	€ 14.70	€ 14.50
Deutsche Telekom AG	0.38%	€ 0.06	€ 14.61	€ 14.61	€ 14.62	€ 14.64	€ 14.46
Deutsche Wohnen SE	0.18%	€ 0.07	€ 39.64	€ 39.65	€ 39.66	€ 40.03	€ 39.48
Deutz AG	-0.29%	€ 0.01	€ 4.17	€ 4.16	€ 4.17	€ 4.21	€ 4.09
DF Deutsche Forfait	3.77%	€ 0.04	€ 1.10	€ 1.08	€ 1.13	€ 1.10	€ 1.07
DFV Deutsche Familienvers. AG	4.59%	€ 1.06	€ 24.06	€ 24.05	€ 24.20	€ 24.60	€ 23.24
Diageo PLC	-1.18%	€ 0.36	€ 29.62	€ 29.55	€ 29.69	€ 29.73	€ 29.37
Dialog Semiconductor Plc	-0.90%	€ 0.36	€ 39.43	€ 39.43	€ 39.48	€ 40.12	€ 39.30
DIC Asset AG	0.51%	€ 0.06	€ 11.78	€ 11.76	€ 11.80	€ 11.88	€ 11.60
Diebold Nixdorf Incorporated	1.67%	€ 0.08	€ 5.06	€ 4.99	€ 5.06	€ 5.06	€ 5.06

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Dierig Holding AG	-3.91%	€ 0.50	€ 12.30	€ 12.30	€ 12.40	€ 12.70	€ 12.10	
DMG Mori AG	0.62%	€ 0.25	€ 40.60	€ 40.50	€ 40.65	€ 40.70	€ 40.55	
Doccheck Aktiengesellschaft	0.00%	€ 0.00	€ 11.00	€ 10.90	€ 11.10	€ 11.00	€ 10.90	
Dow Inc.	3.60%	€ 1.26	€ 36.09	€ 35.07	€ 35.83	€ 36.09	€ 35.97	
Dr Hoenle AG	-0.41%	€ 0.20	€ 48.30	€ 47.95	€ 48.30	€ 49.00	€ 47.70	
Dragerwerk AG	-1.32%	€ 0.80	€ 59.60	€ 59.60	€ 59.80	€ 60.40	€ 59.40	
Dragerwerk AG PRF PERP.	0.57%	€ 0.40	€ 70.30	€ 70.20	€ 70.50	€ 70.50	€ 69.60	
Duerr AG	1.86%	€ 0.42	€ 23.00	€ 22.98	€ 23.00	€ 23.28	€ 22.26	
DuPont de Nemours Inc	-1.77%	€ 0.81	€ 45.00	€ 45.16	€ 46.47	€ 45.00	€ 45.00	
DWS Group GmbH & Co KGaA	-0.77%	€ 0.25	€ 32.05	€ 32.03	€ 32.12	€ 32.25	€ 31.68	
E. On SE	0.72%	€ 0.07	€ 9.80	€ 9.80	€ 9.81	€ 9.86	€ 9.74	
E. On SE	-1.03%	€ 0.10	€ 9.65	€ 9.70	€ 9.80	€ 9.65	€ 9.65	
Easy Software AG	5.08%	€ 0.30	€ 6.20	€ 6.20	€ 6.25	€ 6.20	€ 6.10	
easyJet PLC	3.42%	€ 0.25	€ 7.50	€ 7.50	€ 7.55	€ 7.60	€ 7.33	
eBay Inc.	0.30%	€ 0.14	€ 45.49	€ 45.31	€ 45.60	€ 45.60	€ 44.51	
Eckert & Ziegler AG	-1.64%	€ 2.50	€ 149.50	€ 149.50	€ 149.90	€ 156.10	€ 149.00	
EDAG Engineering Group AG	-1.57%	€ 0.10	€ 6.26	€ 6.17	€ 6.26	€ 6.30	€ 6.20	
Einhell Germany AG	1.18%	€ 0.80	€ 68.80	€ 69.20	€ 69.60	€ 68.80	€ 67.80	
Elbe Financial Group AG	-0.59%	€ 0.20	€ 33.60	€ 33.20	€ 34.00	€ 33.60	€ 33.60	
Electronic Arts Inc.	-0.36%	€ 0.42	€ 115.30	€ 115.40	€ 116.98	€ 117.00	€ 115.30	
Elmos Semiconductor AG	0.72%	€ 0.15	€ 20.95	€ 20.90	€ 21.00	€ 21.55	€ 20.65	
Elringklinger AG	0.58%	€ 0.03	€ 5.19	€ 5.18	€ 5.20	€ 5.27	€ 5.08	
EnBW Wuerttemberg AG	1.21%	€ 0.60	€ 50.00	€ 49.00	€ 50.00	€ 50.00	€ 50.00	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Encavis AG	-0.63%	€ 0.08	€ 12.60	€ 12.58	€ 12.62	€ 12.74	€ 12.46
Enel SpA	0.09%	€ 0.01	€ 7.64	€ 7.61	€ 7.62	€ 7.66	€ 7.63
Energiekontor AG	-1.37%	€ 0.30	€ 21.60	€ 21.60	€ 21.80	€ 21.60	€ 21.60
Eni SpA	-0.54%	€ 0.05	€ 8.36	€ 8.35	€ 8.36	€ 8.50	€ 8.33
Envitec Biogas AG	3.73%	€ 0.70	€ 19.45	€ 19.35	€ 19.55	€ 19.50	€ 19.30
Epigenomics AG	-2.51%	€ 0.04	€ 1.36	€ 1.36	€ 1.40	€ 1.39	€ 1.33
Ergomed Plc	2.32%	€ 0.11	€ 4.86	€ 4.77	€ 4.99	€ 4.86	€ 4.85
Ericsson B	-0.31%	€ 0.03	€ 8.25	€ 8.18	€ 8.20	€ 8.25	€ 8.25
Erste Group Bank AG	1.89%	€ 0.39	€ 20.98	€ 20.95	€ 21.01	€ 20.98	€ 20.56
Evonik Industries AG	1.14%	€ 0.26	€ 23.13	€ 23.13	€ 23.15	€ 23.17	€ 22.83
Evotec SE	0.50%	€ 0.12	€ 24.32	€ 24.30	€ 24.34	€ 24.50	€ 24.10
EXASOL AG NA O.N.	0.00%	€ 0.00	€ 11.20	€ 11.15	€ 11.20	€ 11.20	€ 11.19
exceet Group SE	-5.53%	€ 0.26	€ 4.44	€ 4.18	€ 4.30	€ 4.44	€ 4.44
Expedia Group, Inc.	-5.27%	€ 3.80	€ 68.28	€ 68.28	€ 70.25	€ 70.49	€ 68.28
Exxon Mobil Corporation	-0.28%	€ 0.11	€ 38.89	€ 38.79	€ 38.89	€ 39.18	€ 38.53
EYEMAXX Real Estate AG.	-2.86%	€ 0.20	€ 6.80	€ 6.78	€ 6.98	€ 7.00	€ 6.78
Fabasoft AG	-0.72%	€ 0.20	€ 27.60	€ 27.60	€ 27.90	€ 27.90	€ 27.60
Facebook, Inc. - A	-5.50%	€ 10.94	€ 187.86	€ 187.56	€ 187.82	€ 189.94	€ 185.40
Fast Finance24 Holding AG	0.00%	€ 0.00	€ 0.11	€ 0.11	€ 0.11	€ 0.11	€ 0.11
FCR Immobilien AG	0.00%	€ 0.00	€ 10.90	€ 10.80	€ 10.90	€ 10.90	€ 10.90
Ferratum Oyj	2.56%	€ 0.09	€ 3.61	€ 3.61	€ 3.65	€ 3.68	€ 3.50
Fiat Chrysler Automobiles NV	2.17%	€ 0.19	€ 8.82	€ 8.72	€ 8.76	€ 8.82	€ 8.66
Fielmann AG	1.01%	€ 0.60	€ 60.00	€ 59.90	€ 60.05	€ 60.00	€ 59.10

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
First Majestic Silver Corp.	2.52%	€ 0.20	€ 8.30	€ 8.24	€ 8.29	€ 8.31	€ 8.24	
First Sensor AG	-0.52%	€ 0.20	€ 38.30	€ 38.20	€ 38.40	€ 38.30	€ 38.30	
First Solar, Inc.	-1.77%	€ 0.78	€ 43.40	€ 42.50	€ 43.38	€ 43.83	€ 43.40	
Flatex AG	3.48%	€ 1.45	€ 43.15	€ 43.15	€ 43.25	€ 43.30	€ 41.75	
Ford Motor Company	0.63%	€ 0.03	€ 5.27	€ 5.20	€ 5.27	€ 5.27	€ 5.27	
Formycon AG	-1.29%	€ 0.30	€ 23.00	€ 23.00	€ 23.20	€ 23.20	€ 23.00	
Fortum	-2.88%	€ 0.50	€ 16.68	€ 16.51	€ 16.71	€ 16.68	€ 16.67	
Fraport AG	-2.06%	€ 0.80	€ 38.04	€ 38.00	€ 38.04	€ 39.02	€ 37.52	
Freenet AG	-2.26%	€ 0.32	€ 13.62	€ 13.62	€ 13.63	€ 13.95	€ 13.59	
Frequentis AG	0.00%	€ 0.00	€ 17.40	€ 17.10	€ 17.40	€ 17.40	€ 17.40	
Fresenius Medical Care AG & Co.	-0.05%	€ 0.04	€ 76.44	€ 76.42	€ 76.46	€ 77.14	€ 76.04	
Fresenius SE & Co. KGaA	0.23%	€ 0.10	€ 44.07	€ 44.07	€ 44.08	€ 44.27	€ 43.56	
FUCHS PETROLUB SE	-0.17%	€ 0.05	€ 30.15	€ 30.05	€ 30.20	€ 30.35	€ 29.90	
Fuchs Petrolub SE PRF PERP.	0.17%	€ 0.06	€ 35.56	€ 35.48	€ 35.54	€ 35.86	€ 35.20	
Gateway Real Estate AG	2.99%	€ 0.10	€ 3.44	€ 3.26	€ 3.42	€ 3.44	€ 3.44	
Gazprom PJSC	-0.23%	€ 0.01	€ 4.86	€ 4.86	€ 4.86	€ 4.91	€ 4.83	
GBS Software AG	-3.45%	€ 0.03	€ 0.70	€ 0.70	€ 0.75	€ 0.70	€ 0.70	
GEA Group AG	0.39%	€ 0.11	€ 28.57	€ 28.56	€ 28.58	€ 28.76	€ 28.33	
General Dynamics Corporation	2.09%	€ 2.70	€ 132.00	€ 128.54	€ 132.26	€ 132.00	€ 131.96	
General Electric Company	-0.21%	€ 0.01	€ 5.80	€ 5.78	€ 5.81	€ 5.81	€ 5.76	
General Mills, Inc.	-1.79%	€ 0.96	€ 52.53	€ 52.45	€ 53.18	€ 52.53	€ 52.53	
German Startups Group GmbH	-0.64%	€ 0.01	€ 1.56	€ 1.56	€ 1.61	€ 1.58	€ 1.56	
Gerresheimer AG	0.74%	€ 0.60	€ 81.15	€ 81.10	€ 81.20	€ 81.70	€ 80.40	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Gesco AG	1.01%	€ 0.15	€ 14.95	€ 14.80	€ 15.00	€ 15.00	€ 14.85
GFT Technologies SE	1.14%	€ 0.12	€ 10.68	€ 10.72	€ 10.76	€ 10.76	€ 10.54
Gigaset AG	-0.74%	€ 0.00	€ 0.27	€ 0.25	€ 0.27	€ 0.27	€ 0.27
Gilead Sciences, Inc.	-0.02%	€ 0.01	€ 66.18	€ 66.11	€ 66.30	€ 66.94	€ 66.12
GK Software SE	0.32%	€ 0.20	€ 63.00	€ 61.80	€ 63.00	€ 63.00	€ 63.00
GlaxoSmithKline PLC	0.37%	€ 0.07	€ 18.25	€ 18.21	€ 18.24	€ 18.28	€ 18.16
Global Fashion Group SA	8.56%	€ 0.23	€ 2.90	€ 2.84	€ 28.99	€ 28.99	€ 27.11
Gold Resource Corporation	0.71%	€ 0.02	€ 3.28	€ 3.20	€ 3.43	€ 3.28	€ 3.28
Goldman Sachs Group, Inc.	-1.86%	€ 3.20	€ 168.70	€ 168.06	€ 169.54	€ 170.54	€ 168.02
GoPro, Inc. - A	-3.89%	€ 0.16	€ 3.95	€ 3.95	€ 41.08	€ 39.49	€ 39.49
GORE German Office RE AG	0.52%	€ 0.05	€ 9.65	€ 9.30	€ 9.50	€ 9.65	€ 9.65
Grammer AG	1.36%	€ 0.25	€ 18.65	€ 18.45	€ 18.85	€ 18.65	€ 18.65
Grand City Properties SA	-0.77%	€ 0.16	€ 20.56	€ 20.54	€ 20.58	€ 20.80	€ 20.42
GRENKE AG	1.99%	€ 1.35	€ 69.35	€ 69.20	€ 69.40	€ 69.70	€ 67.50
Grounds Real Estate Dev. AG	-2.13%	€ 0.03	€ 1.38	€ 1.38	€ 1.44	€ 1.38	€ 1.38
H&M B	-4.20%	€ 0.57	€ 12.89	€ 12.91	€ 12.94	€ 12.97	€ 12.89
H&R GmbH & Co KGaA	10.56%	€ 0.55	€ 5.76	€ 5.75	€ 5.83	€ 5.76	€ 5.31
HAEMATO AG	3.16%	€ 0.09	€ 2.94	€ 2.85	€ 2.94	€ 2.94	€ 2.85
Hamborner Reit AG	-1.77%	€ 0.16	€ 8.61	€ 8.59	€ 8.61	€ 8.77	€ 8.60
Hamburger Hafen AG	-0.93%	€ 0.14	€ 14.84	€ 14.82	€ 14.88	€ 15.10	€ 14.68
Hannover Ruck SE	-0.07%	€ 0.10	€ 151.60	€ 151.50	€ 151.70	€ 153.20	€ 150.40
Hapag-Lloyd AG	1.36%	€ 0.70	€ 52.10	€ 52.00	€ 52.30	€ 53.50	€ 51.10
Harley-Davidson, Inc.	-8.90%	€ 1.96	€ 20.06	€ 19.92	€ 20.52	€ 20.06	€ 20.06

Significance Analysis

Negative significance level →	-1.57%	€ 34.60					
Positive significance level →	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Hawesko Holding AG	1.45%	€ 0.50	€ 35.00	€ 34.50	€ 35.00	€ 35.00	€ 34.90
Heidelberg Pharma AG	0.96%	€ 0.04	€ 4.20	€ 4.20	€ 4.24	€ 4.20	€ 4.18
HeidelbergCement AG	1.03%	€ 0.48	€ 47.25	€ 47.24	€ 47.26	€ 47.75	€ 46.62
Heidelberger Druckmaschinen AG	-0.17%	€ 0.00	€ 0.58	€ 0.58	€ 0.58	€ 0.58	€ 0.57
Heineken NV	-2.04%	€ 1.72	€ 82.42	€ 82.58	€ 82.78	€ 83.30	€ 82.42
Heliad Equity Partners GmbH & Co	-2.33%	€ 0.15	€ 6.30	€ 6.20	€ 6.35	€ 6.40	€ 6.30
HELLA GmbH & Co. KGaA	-0.67%	€ 0.24	€ 35.66	€ 35.66	€ 35.72	€ 36.86	€ 35.36
HelloFresh SE	2.33%	€ 1.06	€ 46.46	€ 46.40	€ 46.44	€ 47.10	€ 45.68
HELMA Eigenheimbau AG	-1.38%	€ 0.50	€ 35.70	€ 35.50	€ 35.80	€ 36.00	€ 35.40
Henkel AG & Co. KGAA	-0.41%	€ 0.30	€ 72.15	€ 72.10	€ 72.15	€ 72.60	€ 71.30
Henkel AG & Co. KGAA PRF P.	-0.86%	€ 0.70	€ 80.84	€ 80.82	€ 80.86	€ 81.50	€ 80.06
Hermes International	-0.27%	€ 2.00	€ 735.00	€ 733.80	€ 737.20	€ 738.60	€ 735.00
Hochtief AG	0.65%	€ 0.50	€ 77.55	€ 77.50	€ 77.60	€ 78.75	€ 76.35
HolidayCheck Group AG	9.48%	€ 0.11	€ 1.27	€ 1.25	€ 1.28	€ 1.28	€ 1.20
Home Depot, Inc. (The)	-0.57%	€ 1.25	€ 217.80	€ 213.95	€ 216.60	€ 217.80	€ 217.80
Home24 SE	-0.66%	€ 0.04	€ 6.35	€ 6.35	€ 6.39	€ 6.35	€ 6.12
Honeywell International Inc.	-0.05%	€ 0.06	€ 125.04	€ 121.72	€ 124.36	€ 125.04	€ 125.04
Hornbach Holding AG & Co KGaA	5.24%	€ 3.60	€ 72.30	€ 72.20	€ 72.40	€ 73.30	€ 68.90
Hornbach-Baumarkt AG	3.52%	€ 0.95	€ 27.95	€ 27.80	€ 27.95	€ 27.95	€ 27.05
HP Inc.	1.51%	€ 0.22	€ 14.67	€ 14.69	€ 15.02	€ 14.69	€ 14.67
HSBC Holdings PLC	-1.90%	€ 0.08	€ 4.13	€ 4.14	€ 4.16	€ 4.14	€ 4.12
Hugo Boss AG	1.54%	€ 0.40	€ 26.34	€ 26.32	€ 26.35	€ 26.38	€ 24.92
Hwa AG	0.00%	€ 0.00	€ 10.40	€ 10.20	€ 10.40	€ 10.60	€ 10.40

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Hypoport SE	-2.57%	€ 10.50	€ 397.50	€ 396.50	€ 398.50	€ 408.00	€ 395.00
Iberdrola SA	-1.48%	€ 0.15	€ 10.00	€ 10.01	€ 10.11	€ 10.11	€ 10.00
IFA Hotel & Touristik AG	-3.85%	€ 0.16	€ 4.00	€ 3.92	€ 4.04	€ 4.00	€ 4.00
IFA Systems AG	0.00%	€ 0.00	€ 6.20	€ 6.05	€ 6.20	€ 6.20	€ 6.20
Immofinanz AG	0.20%	€ 0.03	€ 14.85	€ 14.72	€ 14.93	€ 14.95	€ 14.85
Imperial Brands Plc	-1.66%	€ 0.28	€ 16.63	€ 16.59	€ 16.64	€ 16.76	€ 16.57
Indus Holding AG	1.56%	€ 0.45	€ 29.35	€ 29.35	€ 29.50	€ 29.40	€ 28.90
Industria De Diseno Textil SA	1.35%	€ 0.32	€ 24.00	€ 23.76	€ 24.10	€ 24.00	€ 23.90
Infineon Technologies AG	0.22%	€ 0.05	€ 20.60	€ 20.59	€ 20.60	€ 20.91	€ 20.38
InflaRx N.V.	-6.08%	€ 0.26	€ 3.99	€ 4.00	€ 4.31	€ 3.99	€ 3.99
Instone Real Estate Group AG	1.48%	€ 0.28	€ 19.26	€ 19.26	€ 19.38	€ 19.26	€ 18.94
Intel Corporation	-1.01%	€ 0.52	€ 51.09	€ 51.06	€ 51.27	€ 51.17	€ 50.72
IBM Corporation	0.87%	€ 0.90	€ 104.90	€ 104.55	€ 104.90	€ 104.95	€ 104.50
International Consolidated Airlines	2.52%	€ 0.06	€ 2.52	€ 2.40	€ 2.50	€ 2.52	€ 2.52
Intershop Communications AG	-2.60%	€ 0.08	€ 3.00	€ 3.00	€ 3.16	€ 3.00	€ 3.00
Intesa Sanpaolo SpA	-0.37%	€ 0.01	€ 1.66	€ 1.67	€ 16.73	€ 16.73	€ 16.53
iRobot Corporation	-1.81%	€ 1.32	€ 71.72	€ 71.80	€ 73.03	€ 71.72	€ 71.72
Isra Vision AG	-0.37%	€ 0.18	€ 47.92	€ 47.58	€ 47.86	€ 48.40	€ 47.92
IVU Traffic Technologies AG	-1.00%	€ 0.15	€ 14.85	€ 14.80	€ 14.90	€ 15.00	€ 14.80
JDC Group AG	0.00%	€ 0.00	€ 7.00	€ 7.02	€ 7.20	€ 7.00	€ 6.90
JDE Peet's N.V.	-1.12%	€ 0.40	€ 35.30	€ 35.30	€ 35.50	€ 35.40	€ 35.30
Jenoptik AG	-0.10%	€ 0.02	€ 20.64	€ 20.60	€ 20.68	€ 20.96	€ 20.58
Johnson & Johnson	0.37%	€ 0.46	€ 123.54	€ 123.30	€ 123.58	€ 124.46	€ 123.06

Significance Analysis

	Negative significance level →	-1.57%	€ 34.60					
	Positive significance level →	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
JOST Werke AG	3.33%	€ 0.95	€ 29.45	€ 29.30	€ 29.50	€ 29.55	€ 28.25	
JP Morgan Chase & Co.	-0.19%	€ 0.16	€ 82.92	€ 82.70	€ 82.92	€ 83.59	€ 82.70	
Jumia Technologies AG	-4.56%	€ 0.23	€ 4.81	€ 4.49	€ 4.80	€ 4.81	€ 4.81	
Jungheinrich AG	1.20%	€ 0.23	€ 19.44	€ 19.41	€ 19.44	€ 19.63	€ 19.09	
K & S AG	0.14%	€ 0.01	€ 5.60	€ 5.60	€ 5.61	€ 5.76	€ 5.56	
Kellogg Company	0.19%	€ 0.11	€ 57.78	€ 56.90	€ 57.80	€ 57.78	€ 57.78	
KHD Humboldt Wedag Int. AG	0.00%	€ 0.00	€ 1.39	€ 1.39	€ 1.47	€ 1.39	€ 1.38	
Kinross Gold Corp.	4.43%	€ 0.26	€ 6.11	€ 6.11	€ 6.15	€ 6.11	€ 6.10	
Kion Group AG	0.86%	€ 0.46	€ 54.12	€ 54.08	€ 54.14	€ 54.42	€ 53.30	
Klassik Radio	-0.79%	€ 0.05	€ 6.25	€ 6.10	€ 6.25	€ 6.25	€ 6.25	
Kloekner & Co	2.35%	€ 0.11	€ 4.62	€ 4.62	€ 4.63	€ 4.64	€ 4.51	
Knorr-Bremse AG	0.61%	€ 0.55	€ 90.56	€ 90.55	€ 90.60	€ 91.28	€ 89.97	
Koenig & Bauer AG	1.94%	€ 0.37	€ 19.43	€ 19.42	€ 19.50	€ 19.50	€ 19.01	
Kone	-1.51%	€ 0.94	€ 61.50	€ 60.98	€ 61.78	€ 61.50	€ 61.50	
Koninklijke Ahold Delhaize N.V.	-0.50%	€ 0.12	€ 23.85	€ 23.85	€ 23.91	€ 23.93	€ 23.85	
KPS AG	-1.64%	€ 0.10	€ 6.00	€ 6.00	€ 6.04	€ 6.10	€ 6.00	
Krones AG	1.43%	€ 0.80	€ 56.65	€ 56.60	€ 56.80	€ 56.85	€ 56.05	
KSB SE & Co KGaA	2.54%	€ 6.00	€ 242.00	€ 242.00	€ 250.00	€ 250.00	€ 238.00	
KSB SE & Co KGaA	0.00%	€ 0.00	€ 202.00	€ 202.00	€ 203.00	€ 202.00	€ 200.00	
Kuka AG	1.60%	€ 0.60	€ 38.00	€ 38.40	€ 38.70	€ 38.90	€ 37.00	
KWS Saat SE & Co KGaA	0.60%	€ 0.40	€ 66.80	€ 66.70	€ 66.80	€ 66.80	€ 66.40	
Lang & Schwarz AG	1.49%	€ 0.40	€ 27.30	€ 27.30	€ 27.50	€ 28.00	€ 26.70	
Lanxess AG	0.94%	€ 0.44	€ 47.09	€ 47.05	€ 47.09	€ 47.50	€ 45.98	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
LEG Immobilien AG	-0.56%	€ 0.64	€ 113.74	€ 113.70	€ 113.76	€ 115.36	€ 113.30
Leifheit AG	-0.42%	€ 0.10	€ 23.80	€ 23.70	€ 23.80	€ 23.80	€ 23.80
Leoni AG	3.85%	€ 0.25	€ 6.74	€ 6.72	€ 6.75	€ 6.75	€ 6.50
Linde Plc	1.17%	€ 2.15	€ 185.55	€ 185.50	€ 185.55	€ 185.85	€ 183.15
Lion E-Mobility AG	0.00%	€ 0.00	€ 2.60	€ 2.56	€ 2.66	€ 2.66	€ 2.60
Lloyds Banking Group PLC	-1.89%	€ 0.01	€ 0.34	€ 0.34	€ 0.34	€ 0.34	€ 0.34
Logwin AG	-0.75%	€ 1.00	€ 133.00	€ 132.00	€ 133.00	€ 133.00	€ 133.00
L'Oreal	-0.98%	€ 2.80	€ 282.20	€ 282.50	€ 282.90	€ 282.20	€ 282.20
Lotto24	0.55%	€ 0.10	€ 18.30	€ 18.00	€ 18.30	€ 18.30	€ 18.30
LPKF Laser & Electronics AG	4.49%	€ 0.84	€ 19.56	€ 19.54	€ 19.60	€ 19.64	€ 18.78
LUKOIL PJSC	-0.89%	€ 0.60	€ 66.96	€ 66.90	€ 67.10	€ 67.70	€ 66.72
Lumaland AG	-2.21%	€ 0.35	€ 15.50	€ 15.45	€ 15.60	€ 15.85	€ 15.50
Lvmh Moet Hennessy Vuitton SE	-0.15%	€ 0.60	€ 386.55	€ 387.30	€ 387.65	€ 388.90	€ 384.35
Lyft, Inc. - A	-3.52%	€ 1.03	€ 28.20	€ 28.30	€ 28.87	€ 28.20	€ 28.20
M1 Kliniken AG	1.36%	€ 0.15	€ 11.20	€ 11.10	€ 11.20	€ 11.20	€ 11.15
Macy's Inc	-1.02%	€ 0.06	€ 5.54	€ 5.10	€ 5.42	€ 5.54	€ 5.54
Mallinckrodt plc Ordinary Shares	1.65%	€ 0.04	€ 2.49	€ 2.38	€ 25.57	€ 24.90	€ 24.90
Man SE	0.11%	€ 0.05	€ 46.05	€ 46.05	€ 46.15	€ 46.30	€ 46.00
Manz AG	2.13%	€ 0.35	€ 16.80	€ 16.50	€ 16.80	€ 17.40	€ 16.00
Mastercard Incorporated	-1.15%	€ 3.00	€ 257.50	€ 257.35	€ 258.20	€ 259.20	€ 256.70
Masterflex SE	-1.45%	€ 0.06	€ 4.08	€ 4.04	€ 4.10	€ 4.08	€ 4.02
Maternus-Kliniken AG	3.31%	€ 0.08	€ 2.50	€ 2.42	€ 2.58	€ 2.50	€ 2.36
MAX Automation SE	-4.76%	€ 0.16	€ 3.20	€ 3.14	€ 3.20	€ 3.30	€ 3.20

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
MBB SE	-1.81%	€ 1.20	€ 65.00	€ 64.80	€ 65.40	€ 66.60	€ 64.80	
Media and Games Invest plc	-5.26%	€ 0.08	€ 1.35	€ 1.34	€ 1.35	€ 1.46	€ 1.31	
Medical Columbus AG	-1.77%	€ 0.10	€ 5.55	€ 5.55	€ 5.80	€ 5.55	€ 5.55	
Mediclin	-4.00%	€ 0.16	€ 3.84	€ 3.80	€ 3.88	€ 3.84	€ 3.84	
Medigene AG	-0.98%	€ 0.05	€ 5.06	€ 5.06	€ 5.11	€ 5.29	€ 5.02	
Medion AG	0.70%	€ 0.10	€ 14.40	€ 14.20	€ 14.40	€ 14.50	€ 14.40	
Medios AG	0.52%	€ 0.20	€ 38.80	€ 38.60	€ 38.80	€ 38.80	€ 38.30	
Medtronic plc. Ordinary Shares	0.05%	€ 0.04	€ 78.92	€ 78.90	€ 79.18	€ 79.57	€ 78.70	
Mensch und Maschine Software	-0.41%	€ 0.20	€ 48.90	€ 48.70	€ 49.00	€ 49.20	€ 48.60	
MercadoLibre, Inc.	1.56%	€ 13.50	€ 877.30	€ 858.60	€ 877.30	€ 877.30	€ 877.30	
Merck & Company, Inc.	-0.89%	€ 0.60	€ 66.80	€ 66.60	€ 67.40	€ 67.40	€ 66.80	
Merck KGAA	1.12%	€ 1.15	€ 103.65	€ 103.65	€ 103.70	€ 103.75	€ 102.15	
Merkur Bank KGAA	-1.04%	€ 0.10	€ 9.55	€ 9.50	€ 9.80	€ 9.55	€ 9.55	
Metro AG	-0.62%	€ 0.05	€ 8.33	€ 8.32	€ 8.33	€ 8.43	€ 8.26	
Metro AG VR PRF PERP. EUR	0.00%	€ 0.00	€ 8.84	€ 8.64	€ 9.32	€ 8.84	€ 8.84	
MeVis Medical Solutions AG	0.56%	€ 0.20	€ 35.80	€ 36.00	€ 36.60	€ 36.60	€ 35.00	
Microchip Technology Incorporated	-0.09%	€ 0.08	€ 89.50	€ 88.27	€ 90.19	€ 89.50	€ 89.50	
Micron Technology, Inc.	0.22%	€ 0.10	€ 43.23	€ 43.06	€ 43.10	€ 43.95	€ 42.49	
Microsoft Corporation	-0.72%	€ 1.26	€ 174.74	€ 174.34	€ 174.70	€ 175.00	€ 173.68	
MLP SE	-0.92%	€ 0.05	€ 5.40	€ 5.41	€ 5.44	€ 5.53	€ 5.40	
MMC Norilsk Nickel PJSC	-2.38%	€ 0.60	€ 24.56	€ 24.56	€ 24.60	€ 24.74	€ 24.45	
Mobotix AG	1.56%	€ 0.10	€ 6.50	€ 6.35	€ 6.50	€ 6.50	€ 6.50	
Mologen AG	-7.29%	€ 0.01	€ 0.10	€ 0.10	€ 0.11	€ 0.10	€ 0.10	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Mondelez International, Inc. - A	0.13%	€ 0.06	€ 45.00	€ 44.13	€ 45.00	€ 45.00	€ 45.00
Morphosys AG	-1.21%	€ 1.40	€ 114.20	€ 114.15	€ 114.30	€ 115.95	€ 113.55
MPH Health Care AG	-1.74%	€ 0.05	€ 2.83	€ 2.83	€ 2.88	€ 2.88	€ 2.76
MS Industrie AG	-2.02%	€ 0.03	€ 1.46	€ 1.46	€ 1.51	€ 1.52	€ 1.46
MTU Aero Engines AG	0.93%	€ 1.40	€ 151.80	€ 151.70	€ 151.80	€ 155.15	€ 149.00
Rueckversicherungs AG	0.13%	€ 0.30	€ 225.80	€ 225.70	€ 225.80	€ 227.90	€ 223.20
Mutares SE & Co KGaA	1.02%	€ 0.10	€ 9.94	€ 9.91	€ 9.98	€ 9.98	€ 9.84
Mvise AG	-2.88%	€ 0.07	€ 2.36	€ 2.36	€ 2.49	€ 2.36	€ 2.36
MVV Energie AG	0.75%	€ 0.20	€ 26.80	€ 26.60	€ 27.00	€ 26.80	€ 26.80
Wertpapierhandelsbank AG	0.00%	€ 0.00	€ 4.30	€ 4.26	€ 4.30	€ 4.30	€ 4.30
MyBucks S.A.	-3.75%	€ 0.02	€ 0.46	€ 0.46	€ 0.50	€ 0.46	€ 0.46
MyHammer Holding AG	2.47%	€ 0.40	€ 16.60	€ 16.30	€ 16.90	€ 16.70	€ 16.40
Mynaric AG	-2.26%	€ 1.10	€ 47.50	€ 47.30	€ 47.90	€ 48.90	€ 47.50
Nabaltec AG	1.90%	€ 0.40	€ 21.50	€ 21.50	€ 21.70	€ 21.50	€ 21.30
Nanogate SE	-2.50%	€ 0.05	€ 1.95	€ 1.95	€ 2.00	€ 2.00	€ 1.73
NanoRepro AG	3.51%	€ 0.04	€ 1.18	€ 1.09	€ 1.14	€ 1.18	€ 1.04
Nemetschek SE	0.00%	€ 0.00	€ 61.50	€ 61.50	€ 61.55	€ 62.30	€ 60.90
Nestle SA	0.20%	€ 0.20	€ 98.80	€ 98.40	€ 98.80	€ 98.80	€ 98.80
Netflix, Inc.	-2.80%	€ 11.35	€ 393.90	€ 392.90	€ 393.90	€ 393.90	€ 389.30
New Work SE	-0.19%	€ 0.50	€ 269.50	€ 267.50	€ 269.50	€ 271.50	€ 268.50
Newmont Corporation	1.63%	€ 0.85	€ 53.14	€ 52.64	€ 53.36	€ 53.70	€ 53.00
NeXR Technologies SE	-10.60%	€ 0.80	€ 6.75	€ 5.55	€ 6.95	€ 7.75	€ 6.75
Nexus AG	1.52%	€ 0.60	€ 40.00	€ 40.00	€ 40.20	€ 40.20	€ 39.70

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Nexway A	1.04%	€ 0.10	€ 9.70	€ 9.70	€ 9.85	€ 9.70	€ 9.70	
NFON AG	-0.17%	€ 0.02	€ 13.20	€ 13.20	€ 13.25	€ 13.20	€ 13.20	
NIIIO Finance Group AG	13.10%	€ 0.10	€ 0.82	€ 0.79	€ 0.83	€ 0.85	€ 0.73	
Nike, Inc.	-2.44%	€ 2.09	€ 83.45	€ 83.45	€ 83.91	€ 83.95	€ 83.21	
Technology GmbH & Co KGaA	4.93%	€ 0.46	€ 9.80	€ 9.74	€ 10.00	€ 10.45	€ 9.48	
Nordex SE	1.40%	€ 0.12	€ 8.70	€ 8.68	€ 8.71	€ 8.75	€ 8.45	
NORMA Group SE	0.51%	€ 0.12	€ 23.70	€ 23.70	€ 23.76	€ 23.86	€ 23.18	
Northern Data AG	1.06%	€ 0.80	€ 76.40	€ 76.20	€ 76.40	€ 77.20	€ 76.00	
Northrop Grumman Corporation	-0.52%	€ 1.40	€ 266.00	€ 266.00	€ 271.35	€ 266.05	€ 266.00	
Novo Nordisk B	0.12%	€ 0.07	€ 59.18	€ 59.17	€ 59.26	€ 59.52	€ 59.00	
NUERNBERGER Beteiligungs AG	0.74%	€ 0.50	€ 68.50	€ 68.00	€ 68.50	€ 68.50	€ 68.00	
NVIDIA Corporation	-0.56%	€ 1.85	€ 326.85	€ 325.65	€ 327.10	€ 327.15	€ 324.60	
Occidental Petroleum Corporation	-1.32%	€ 0.21	€ 15.45	€ 15.45	€ 15.88	€ 15.91	€ 15.44	
Oesterreichische Post AG	-5.06%	€ 1.60	€ 30.00	€ 29.75	€ 30.15	€ 30.10	€ 29.65	
OHB SE	-3.04%	€ 1.30	€ 41.45	€ 41.40	€ 41.65	€ 42.60	€ 41.10	
Okoworld AG PRF PERP.	-2.21%	€ 0.40	€ 17.70	€ 17.50	€ 17.80	€ 17.70	€ 17.70	
OMV AG	-0.95%	€ 0.28	€ 29.22	€ 29.32	€ 29.42	€ 29.60	€ 29.00	
Openlimit Holding AG	3.85%	€ 0.01	€ 0.14	€ 0.13	€ 0.14	€ 0.14	€ 0.14	
Osram Licht AG	0.50%	€ 0.21	€ 42.41	€ 42.37	€ 42.43	€ 42.56	€ 42.26	
OSRAM Licht AG	0.25%	€ 0.10	€ 40.80	€ 40.80	€ 40.90	€ 40.90	€ 40.80	
Ovb Holding	0.00%	€ 0.00	€ 16.60	€ 16.20	€ 16.60	€ 16.60	€ 16.60	
Paion AG	0.79%	€ 0.02	€ 2.56	€ 2.55	€ 2.56	€ 2.59	€ 2.55	
Pantaflix AG	2.21%	€ 0.03	€ 1.39	€ 1.31	€ 1.39	€ 1.39	€ 1.39	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Paragon GmbH & Co. KGaA	4.90%	€ 0.38	€ 8.13	€ 7.92	€ 8.16	€ 8.29	€ 7.81
PATRIZIA AG	1.14%	€ 0.25	€ 22.25	€ 22.25	€ 22.35	€ 22.30	€ 22.00
PayPal Holdings, Inc.	0.04%	€ 0.06	€ 152.48	€ 152.22	€ 152.48	€ 153.02	€ 151.18
PepsiCo, Inc.	-1.39%	€ 1.62	€ 114.56	€ 114.56	€ 115.14	€ 116.20	€ 114.56
Petro Welt Technologies AG	-3.19%	€ 0.09	€ 2.73	€ 2.56	€ 2.76	€ 2.74	€ 2.73
Pfeiffer Vacuum Technology AG	-0.25%	€ 0.40	€ 162.00	€ 162.40	€ 162.80	€ 162.60	€ 161.80
Pferdewetten.de AG	0.00%	€ 0.00	€ 9.90	€ 9.90	€ 10.10	€ 10.20	€ 9.90
Pfizer, Inc.	1.77%	€ 0.50	€ 28.80	€ 28.60	€ 28.80	€ 28.90	€ 28.50
PHARMASGP HOLDING SE O.N.	2.33%	€ 0.75	€ 33.00	€ 32.40	€ 33.00	€ 33.00	€ 32.95
Philion Se Bearer NPV	-0.96%	€ 0.02	€ 2.06	€ 1.90	€ 2.04	€ 2.10	€ 1.81
Philip Morris International Inc	-3.07%	€ 1.91	€ 60.40	€ 61.41	€ 62.08	€ 60.40	€ 60.40
PIERER Mobility AG	0.00%	€ 0.00	€ 44.80	€ 43.80	€ 44.80	€ 44.80	€ 44.80
PNE AG	0.20%	€ 0.01	€ 4.95	€ 4.95	€ 4.97	€ 4.97	€ 4.92
Porsche Automobil Holding	-0.16%	€ 0.08	€ 50.52	€ 50.50	€ 50.56	€ 51.50	€ 49.79
Preos Real Estate AG	1.95%	€ 0.30	€ 15.70	€ 15.40	€ 15.70	€ 15.70	€ 15.60
Procter & Gamble Company	-0.96%	€ 1.00	€ 103.50	€ 102.50	€ 103.50	€ 103.50	€ 102.50
Prosiebensati Media SE	3.91%	€ 0.40	€ 10.50	€ 10.49	€ 10.50	€ 10.80	€ 10.24
Prosus NV	0.45%	€ 0.36	€ 80.48	€ 80.14	€ 80.50	€ 80.48	€ 79.82
Prudential PLC	0.11%	€ 0.02	€ 13.13	€ 13.03	€ 13.27	€ 13.13	€ 13.13
PSI Software AG	0.49%	€ 0.10	€ 20.50	€ 20.40	€ 20.60	€ 20.70	€ 20.50
publity AG	-0.70%	€ 0.25	€ 35.40	€ 35.40	€ 35.65	€ 35.50	€ 35.40
Puma SE	-0.06%	€ 0.04	€ 67.46	€ 67.44	€ 67.46	€ 68.06	€ 66.74
PVA TePla AG	1.48%	€ 0.16	€ 10.96	€ 11.04	€ 11.12	€ 11.24	€ 10.90

Significance Analysis

	Negative significance level →	-1.57%	€ 34.60					
	Positive significance level →	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
QIAGEN NV	-0.36%	€ 0.14	€ 38.79	€ 38.78	€ 38.81	€ 38.92	€ 38.69	
QSC AG	-0.85%	€ 0.01	€ 1.40	€ 1.40	€ 1.41	€ 1.42	€ 1.40	
QUALCOMM Incorporated	-1.93%	€ 1.51	€ 76.86	€ 77.92	€ 78.84	€ 76.86	€ 76.86	
R Stahl AG	3.59%	€ 0.70	€ 20.20	€ 20.20	€ 20.40	€ 20.20	€ 19.70	
Raiffeisen Bank International AG	-2.59%	€ 0.42	€ 15.79	€ 15.64	€ 15.86	€ 15.79	€ 15.79	
Rational AG	-0.93%	€ 4.60	€ 491.80	€ 491.20	€ 491.80	€ 502.00	€ 487.80	
Raytheon Technologies Corp.	1.68%	€ 0.90	€ 54.36	€ 53.06	€ 54.36	€ 54.36	€ 53.68	
RCM Beteiligungs AG	1.92%	€ 0.04	€ 2.12	€ 2.10	€ 2.16	€ 2.12	€ 2.10	
REALTECH AG	-2.47%	€ 0.02	€ 0.79	€ 0.77	€ 0.81	€ 0.79	€ 0.79	
Reckitt Benckiser Group PLC	-0.20%	€ 0.16	€ 80.08	€ 80.10	€ 80.28	€ 80.14	€ 79.32	
RELX PLC	0.91%	€ 0.19	€ 21.00	€ 20.68	€ 21.00	€ 21.00	€ 21.00	
Repsol SA	-1.95%	€ 0.15	€ 7.66	€ 7.69	€ 7.76	€ 7.78	€ 7.66	
Rheinmetall AG	0.94%	€ 0.72	€ 77.26	€ 77.22	€ 77.30	€ 77.74	€ 76.10	
Rhoen-Klinikum AG	0.00%	€ 0.00	€ 18.20	€ 18.20	€ 18.24	€ 18.22	€ 18.14	
RIB Software SE	-0.68%	€ 0.20	€ 29.00	€ 29.00	€ 29.20	€ 29.00	€ 29.00	
RIB Software SE	-1.21%	€ 0.32	€ 26.04	€ 26.14	€ 26.24	€ 26.04	€ 26.04	
Rio Tinto plc	-0.90%	€ 0.45	€ 49.43	€ 49.47	€ 49.50	€ 49.64	€ 49.25	
Rocket Internet SE	-0.16%	€ 0.03	€ 18.97	€ 18.96	€ 18.98	€ 19.02	€ 18.80	
ROY ASSET HLDG INH O.N.	-11.68%	€ 0.03	€ 0.24	€ 0.24	€ 0.30	€ 0.24	€ 0.24	
Royal Bank of Scotland PLC	-1.62%	€ 0.02	€ 1.31	€ 1.32	€ 13.21	€ 13.10	€ 13.10	
Royal Dutch Shell PLC	-0.64%	€ 0.09	€ 14.64	€ 14.62	€ 14.64	€ 14.82	€ 14.51	
Royal Dutch Shell PLC	-1.11%	€ 0.15	€ 13.73	€ 13.74	€ 13.76	€ 13.94	€ 13.64	
RTL Group SA	1.42%	€ 0.40	€ 28.54	€ 28.48	€ 28.58	€ 28.86	€ 28.08	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
RWE AG	-3.27%	€ 1.03	€ 30.45	€ 30.45	€ 30.46	€ 30.97	€ 30.40
Ryanair Holdings Plc	2.72%	€ 0.28	€ 10.57	€ 10.56	€ 10.62	€ 10.59	€ 10.48
S IMMO AG	-2.16%	€ 0.34	€ 15.40	€ 15.42	€ 15.48	€ 15.40	€ 15.40
S&T AG	0.88%	€ 0.20	€ 22.98	€ 22.94	€ 23.00	€ 23.04	€ 22.50
SAF-Holland SE	2.82%	€ 0.15	€ 5.28	€ 5.26	€ 5.29	€ 5.28	€ 5.07
Salesforce.Com Inc	-1.10%	€ 1.82	€ 163.48	€ 161.94	€ 163.48	€ 163.50	€ 162.12
Salzgitter AG	5.96%	€ 0.68	€ 12.00	€ 11.97	€ 12.00	€ 12.07	€ 11.27
Sap SE	0.31%	€ 0.38	€ 122.50	€ 122.48	€ 122.52	€ 122.90	€ 121.58
Sartorius AG	-0.40%	€ 1.00	€ 248.00	€ 247.00	€ 249.00	€ 252.00	€ 247.00
Sartorius AG PRF PERP. EUR	-0.74%	€ 2.20	€ 295.80	€ 295.60	€ 296.00	€ 299.80	€ 294.60
Schaeffler AG	0.00%	€ 0.00	€ 6.65	€ 6.65	€ 6.66	€ 6.81	€ 6.58
Schaltbau Holding AG	3.25%	€ 0.80	€ 25.40	€ 25.30	€ 25.40	€ 25.40	€ 24.50
Schoeller-Bleckmann AG	-2.51%	€ 0.60	€ 23.30	€ 22.95	€ 23.50	€ 23.30	€ 23.30
Schweizer Electronic AG	0.00%	€ 0.00	€ 11.80	€ 11.60	€ 11.85	€ 11.80	€ 11.80
Scout24 AG	0.07%	€ 0.05	€ 68.75	€ 68.70	€ 68.80	€ 69.35	€ 68.60
Secunet Security Networks AG	1.42%	€ 3.00	€ 215.00	€ 212.00	€ 215.00	€ 216.00	€ 212.00
Serviceware SE	3.45%	€ 0.40	€ 12.00	€ 12.00	€ 12.05	€ 12.00	€ 11.70
SFC Energy AG	0.59%	€ 0.08	€ 13.60	€ 13.60	€ 13.72	€ 13.70	€ 13.24
SGL Carbon SE	1.96%	€ 0.06	€ 3.12	€ 3.11	€ 3.13	€ 3.19	€ 3.05
Shop Apotheke Europe NV	-0.19%	€ 0.20	€ 103.80	€ 103.60	€ 104.00	€ 106.40	€ 103.40
SHS Viveon AG	2.66%	€ 0.25	€ 9.65	€ 9.40	€ 9.65	€ 9.65	€ 9.40
Siemens AG	0.94%	€ 0.96	€ 102.80	€ 102.76	€ 102.80	€ 102.84	€ 101.30
Siemens Gamesa Energy SA	1.38%	€ 0.21	€ 15.48	€ 15.39	€ 15.51	€ 15.54	€ 15.48

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
Siemens Healthineers AG	-0.54%	€ 0.24	€ 43.00	€ 43.01	€ 43.04	€ 43.36	€ 42.70	
Siltronic AG	-0.85%	€ 0.76	€ 88.66	€ 88.54	€ 88.68	€ 89.78	€ 86.72	
Singulus Technologies AG	-1.42%	€ 0.06	€ 4.16	€ 4.15	€ 4.24	€ 4.29	€ 4.16	
Sirius XM Holdings Inc.	1.50%	€ 0.08	€ 5.08	€ 4.78	€ 5.09	€ 5.08	€ 5.08	
Sixt Leasing SE	0.00%	€ 0.00	€ 18.00	€ 17.90	€ 18.00	€ 18.00	€ 18.00	
Sixt Leasing SE	0.86%	€ 0.14	€ 16.38	€ 16.22	€ 16.36	€ 16.38	€ 16.38	
Sixt SE	0.36%	€ 0.25	€ 68.80	€ 68.75	€ 68.95	€ 70.05	€ 68.15	
Sixt SE PRF PERP. EUR	0.54%	€ 0.25	€ 46.25	€ 46.10	€ 46.25	€ 46.95	€ 45.60	
Slack Technologies, Inc. A	-2.40%	€ 0.70	€ 28.50	€ 28.50	€ 29.10	€ 29.40	€ 28.50	
SLM Solutions Group AG	-4.82%	€ 0.33	€ 6.52	€ 6.52	€ 6.56	€ 6.72	€ 6.30	
SMA Solar Technology AG	-0.30%	€ 0.08	€ 27.00	€ 26.94	€ 27.00	€ 27.16	€ 26.42	
Snap Inc. A	-6.24%	€ 1.32	€ 19.79	€ 19.83	€ 19.94	€ 19.97	€ 19.63	
SNP Schneider-Neur. & Part. SE	5.04%	€ 2.15	€ 44.80	€ 44.60	€ 44.80	€ 44.90	€ 42.70	
Societe Generale SA	0.17%	€ 0.02	€ 14.52	€ 14.60	€ 14.64	€ 14.74	€ 14.43	
Softing AG	-0.38%	€ 0.02	€ 5.26	€ 5.20	€ 5.26	€ 5.34	€ 5.26	
Software AG	-1.87%	€ 0.66	€ 34.70	€ 34.66	€ 34.72	€ 34.96	€ 34.42	
Solutions 30 SE	-1.46%	€ 0.18	€ 12.11	€ 12.08	€ 12.34	€ 12.20	€ 12.11	
Southwest Airlines Company	2.61%	€ 0.74	€ 28.90	€ 28.51	€ 29.03	€ 28.90	€ 28.71	
Sporttotal AG	-7.73%	€ 0.07	€ 0.81	€ 0.81	€ 0.84	€ 0.81	€ 0.81	
Spotify Technology S.A. Ord. Shares	2.01%	€ 4.70	€ 238.00	€ 235.75	€ 239.45	€ 244.40	€ 234.00	
Stabilus SA	3.73%	€ 1.68	€ 46.70	€ 46.66	€ 46.76	€ 47.18	€ 45.32	
Starbucks Corporation	-1.78%	€ 1.15	€ 63.34	€ 62.98	€ 63.22	€ 63.69	€ 61.95	
Steico SE	0.31%	€ 0.10	€ 32.50	€ 32.50	€ 32.90	€ 32.80	€ 32.40	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Steinhoff International Hold. N.V.	0.19%	€ 0.00	€ 0.05	€ 0.05	€ 0.05	€ 0.05	€ 0.05
Stemmer Imaging AG	-2.21%	€ 0.38	€ 17.00	€ 16.90	€ 17.10	€ 17.68	€ 17.00
STO SE & Co KGaA	1.43%	€ 1.40	€ 99.00	€ 99.10	€ 99.60	€ 99.90	€ 98.70
STRATEC SE	1.46%	€ 1.20	€ 83.60	€ 83.40	€ 83.80	€ 84.30	€ 82.60
Stroer SE & Co. KGaA	-0.59%	€ 0.35	€ 59.30	€ 59.25	€ 59.35	€ 59.85	€ 58.45
Stryker Corporation	-0.84%	€ 1.30	€ 153.06	€ 153.16	€ 156.38	€ 157.00	€ 153.06
STS Group AG	-4.04%	€ 0.09	€ 2.14	€ 2.08	€ 2.14	€ 2.15	€ 2.14
Sudzucker AG.	0.28%	€ 0.04	€ 14.09	€ 14.06	€ 14.10	€ 14.12	€ 13.77
SUESS MicroTec SE	-1.68%	€ 0.24	€ 14.06	€ 14.08	€ 14.12	€ 14.44	€ 13.90
Surteco Group SE	1.00%	€ 0.20	€ 20.30	€ 20.10	€ 20.30	€ 20.30	€ 20.30
Symrise AG	-0.25%	€ 0.25	€ 101.30	€ 101.30	€ 101.40	€ 102.50	€ 100.70
Synopsys, Inc.	1.06%	€ 1.80	€ 171.60	€ 167.50	€ 172.34	€ 171.60	€ 171.60
TAG Immobilien AG	0.19%	€ 0.04	€ 21.44	€ 21.42	€ 21.46	€ 21.68	€ 21.34
Takkt AG	2.04%	€ 0.18	€ 9.00	€ 8.99	€ 9.03	€ 9.00	€ 8.73
Talanx AG	-0.68%	€ 0.22	€ 32.08	€ 32.06	€ 32.10	€ 32.60	€ 31.86
TeamViewer AG	-2.58%	€ 1.23	€ 46.41	€ 46.34	€ 46.40	€ 47.83	€ 46.36
Technotrans SE	0.36%	€ 0.06	€ 16.86	€ 16.52	€ 16.74	€ 17.10	€ 16.54
Tele Columbus AG	-1.46%	€ 0.05	€ 3.05	€ 3.03	€ 3.05	€ 3.08	€ 3.01
Telefonica Deutschland Hold. AG	-0.73%	€ 0.02	€ 2.58	€ 2.58	€ 2.59	€ 2.61	€ 2.57
Telefonica S.A	1.02%	€ 0.04	€ 4.25	€ 4.25	€ 4.25	€ 4.25	€ 4.19
Telekom Austria AG	0.64%	€ 0.04	€ 6.25	€ 6.09	€ 6.22	€ 6.25	€ 6.25
Tesla, Inc.	-0.68%	€ 5.90	€ 860.10	€ 859.30	€ 860.40	€ 870.30	€ 845.00
The Kraft Heinz Company	-0.07%	€ 0.02	€ 27.73	€ 27.56	€ 27.73	€ 27.88	€ 27.60

Significance Analysis

	Negative significance level→	-1.57%	€ 34.60					
	Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Company in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest	
The Naga Group AG	1.92%	€ 0.06	€ 3.18	€ 3.04	€ 3.16	€ 3.18	€ 3.16	
thyssenkrupp AG	2.88%	€ 0.17	€ 6.07	€ 6.06	€ 6.07	€ 6.12	€ 5.81	
Tilray, Inc. - Class 2	-1.34%	€ 0.10	€ 7.08	€ 6.85	€ 7.08	€ 7.08	€ 6.85	
TLG Immobilien AG	0.57%	€ 0.10	€ 17.50	€ 17.50	€ 17.57	€ 18.00	€ 17.31	
Tom Tailor Holding SE	7.89%	€ 0.03	€ 0.39	€ 0.39	€ 0.39	€ 0.39	€ 0.36	
Traffic Systems SE	2.56%	€ 0.80	€ 32.10	€ 32.00	€ 32.10	€ 32.80	€ 31.00	
TRATON SE	3.89%	€ 0.68	€ 18.05	€ 18.03	€ 18.07	€ 18.07	€ 17.55	
Traumhaus AG	-0.76%	€ 0.10	€ 13.10	€ 12.90	€ 13.10	€ 13.10	€ 13.10	
Tui AG	4.02%	€ 0.16	€ 4.12	€ 4.11	€ 4.12	€ 4.24	€ 3.87	
Twitter Inc	-6.15%	€ 1.66	€ 25.34	€ 25.28	€ 25.41	€ 25.90	€ 25.10	
Uber Technologies, Inc.	-1.62%	€ 0.43	€ 26.14	€ 26.04	€ 26.16	€ 26.59	€ 26.08	
Umweltbank AG	0.00%	€ 0.00	€ 12.20	€ 12.10	€ 12.25	€ 12.30	€ 12.15	
UniCredit SpA	2.86%	€ 0.23	€ 8.12	€ 8.11	€ 8.12	€ 8.12	€ 7.90	
UNIDEVICE AG INH O.N.	4.67%	€ 0.10	€ 2.24	€ 2.18	€ 2.24	€ 2.24	€ 2.18	
Unilever	-2.31%	€ 1.13	€ 47.88	€ 47.84	€ 47.88	€ 48.33	€ 47.61	
Unilever PLC	-1.64%	€ 0.83	€ 49.63	€ 48.90	€ 49.13	€ 49.63	€ 49.63	
Uniper SE	-0.35%	€ 0.10	€ 28.36	€ 28.36	€ 28.38	€ 28.70	€ 28.10	
United Internet AG	-0.79%	€ 0.29	€ 36.36	€ 36.36	€ 36.37	€ 36.60	€ 36.20	
UnitedHealth Group Incorporated	-0.17%	€ 0.45	€ 258.95	€ 254.00	€ 258.75	€ 258.95	€ 258.95	
USU Software AG	1.49%	€ 0.30	€ 20.50	€ 20.20	€ 20.60	€ 20.50	€ 20.00	
Uzin Utz AG	0.00%	€ 0.00	€ 55.00	€ 55.00	€ 55.80	€ 55.00	€ 55.00	
Vapiano SE	1.79%	€ 0.01	€ 0.29	€ 0.27	€ 0.28	€ 0.29	€ 0.26	
va-Q-tec AG	-0.65%	€ 0.10	€ 15.40	€ 15.35	€ 15.45	€ 15.70	€ 15.10	

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Varengold Bank AG	-1.07%	€ 0.04	€ 3.70	€ 3.70	€ 3.76	€ 3.70	€ 3.70
Varta AG	2.66%	€ 2.40	€ 92.75	€ 92.70	€ 92.80	€ 92.95	€ 89.75
Vectron Systems AG.	-2.43%	€ 0.18	€ 7.22	€ 7.20	€ 7.24	€ 7.32	€ 7.20
Veolia Environnement SA	-0.32%	€ 0.07	€ 19.99	€ 20.02	€ 20.06	€ 20.10	€ 19.96
VERBIO Vereinigte BioEnergie AG	-1.27%	€ 0.12	€ 9.32	€ 9.31	€ 9.35	€ 9.54	€ 9.29
Verianos Real Estate AG	4.90%	€ 0.05	€ 1.07	€ 0.98	€ 1.07	€ 1.07	€ 1.07
Verizon Communications Inc.	-0.29%	€ 0.14	€ 47.40	€ 47.22	€ 47.51	€ 48.09	€ 47.15
Vertex Pharmaceuticals Incorporated	-1.19%	€ 3.05	€ 254.00	€ 254.05	€ 258.00	€ 254.00	€ 254.00
Vestas Wind Systems	-0.61%	€ 0.54	€ 88.58	€ 88.80	€ 88.90	€ 89.30	€ 88.00
VIB Vermoegen AG	1.87%	€ 0.50	€ 27.30	€ 27.20	€ 27.35	€ 27.65	€ 26.95
Villeroy & Boch PRF PERP. EUR	-0.42%	€ 0.05	€ 11.75	€ 11.80	€ 11.90	€ 11.90	€ 11.75
Visa Inc.	-1.24%	€ 2.12	€ 168.48	€ 168.20	€ 168.70	€ 169.00	€ 167.60
Viscom AG	-1.58%	€ 0.14	€ 8.72	€ 8.74	€ 8.88	€ 8.92	€ 8.72
VITA 34 AG	-0.76%	€ 0.10	€ 13.00	€ 13.00	€ 13.30	€ 13.00	€ 12.85
Vmware, Inc. Common stock, A	-0.99%	€ 1.32	€ 132.10	€ 129.02	€ 131.84	€ 132.10	€ 132.10
Vodafone Group PLC	0.12%	€ 0.00	€ 1.38	€ 1.38	€ 13.79	€ 13.84	€ 13.70
Vodafone Group Plc – Am. Depository	-3.52%	€ 0.50	€ 13.70	€ 13.60	€ 13.90	€ 13.70	€ 13.70
Volkswagen AG	0.42%	€ 0.60	€ 142.90	€ 142.70	€ 142.90	€ 144.70	€ 141.10
Volkswagen AG ZC PRF P	0.06%	€ 0.08	€ 133.40	€ 133.40	€ 133.44	€ 135.60	€ 131.80
Voltabox AG	-14.88%	€ 0.61	€ 3.46	€ 3.30	€ 3.45	€ 4.00	€ 3.11
Vonovia SE	-0.33%	€ 0.18	€ 53.98	€ 53.96	€ 53.98	€ 54.70	€ 53.90
Vossloh AG	1.91%	€ 0.75	€ 39.95	€ 39.80	€ 39.95	€ 39.95	€ 39.25

Significance Analysis

Negative significance level→	-1.57%	€ 34.60					
Positive significance level→	1.36%	€ 0.60	€ 44.80	€ 43.01	€ 44.59	€ 43.30	€ 44.03
Compnay in Germany	Today %	Today +/-	Last	Buy	Sell	Highest	Lowest
Wacker Chemie AG	2.77%	€ 1.66	€ 61.66	€ 61.62	€ 61.72	€ 61.74	€ 59.92
Wacker Neuson SE	3.79%	€ 0.50	€ 13.70	€ 13.63	€ 13.70	€ 13.71	€ 13.20
Wallstreet Online AG	0.21%	€ 0.10	€ 47.90	€ 47.20	€ 47.70	€ 47.90	€ 47.90
Walmart Inc.	-1.35%	€ 1.44	€ 105.14	€ 105.12	€ 106.02	€ 107.02	€ 105.14
Walt Disney Company (The)	0.09%	€ 0.09	€ 97.34	€ 97.26	€ 97.46	€ 97.71	€ 96.84
Washtec AG	1.24%	€ 0.45	€ 36.60	€ 36.50	€ 36.60	€ 36.75	€ 35.95
Waste Management, Inc.	0.07%	€ 0.06	€ 91.50	€ 91.50	€ 92.60	€ 93.00	€ 91.50
Wells Fargo & Company	-1.20%	€ 0.28	€ 22.70	€ 22.74	€ 22.92	€ 23.04	€ 22.61
WESTGRUND AG	0.00%	€ 0.00	€ 11.90	€ 11.80	€ 11.90	€ 11.90	€ 11.90
Westinghouse Air Brake Techn.	-3.44%	€ 1.74	€ 48.81	€ 49.12	€ 50.55	€ 48.81	€ 48.81
Westwing Group AG	-0.32%	€ 0.02	€ 7.28	€ 7.31	€ 7.38	€ 7.38	€ 6.90
Wienerberger AG	1.30%	€ 0.25	€ 19.45	€ 19.27	€ 19.42	€ 19.45	€ 19.00
Williams Grand Prix Holding	-0.79%	€ 0.10	€ 12.50	€ 12.20	€ 12.60	€ 12.50	€ 12.50
Wirecard AG	138.10%	€ 1.77	€ 3.05	€ 3.10	€ 3.10	€ 4.05	€ 1.66
Wuestenrot & Wuerttemberg. AG	0.39%	€ 0.06	€ 15.32	€ 15.26	€ 15.34	€ 15.38	€ 15.16
XPhyto Therapeutics Corp	4.02%	€ 0.07	€ 1.68	€ 1.63	€ 1.74	€ 1.77	€ 1.58
Yamana Gold Inc.	0.12%	€ 0.01	€ 4.58	€ 4.56	€ 46.30	€ 46.60	€ 45.76
Zalando SE	-1.04%	€ 0.66	€ 62.56	€ 62.56	€ 62.58	€ 63.98	€ 62.38
Zeal Network SE	-0.77%	€ 0.25	€ 32.15	€ 32.15	€ 32.35	€ 32.50	€ 32.15
Zooplus AG	-0.27%	€ 0.40	€ 148.20	€ 148.00	€ 148.60	€ 150.00	€ 148.00