

Erasmus Platform for Sustainable Value Creation

Committed shareholders

Geographic exposures report

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August 2019

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1 Introduction

This report presents data on the geographic segmentation of the companies in the AEX index, the Dutch stock index of the 25 most frequently traded securities on Euronext Amsterdam. This report aims to give an overview to investors of the international diversification of large Dutch multinational companies' operations.

Companies' revenue data is the main benchmark to gain insights into the diversification opportunities within concentrated portfolios. The distribution of revenues across the world can serve as a tool to assess the risk exposure of companies to specific economic and political environments. The findings indicate that investing in a portfolio of large Dutch companies (listed on the AEX) leads to an exposure of 10 per cent to the Dutch economy, 30 per cent to the rest of Europe, and 60 per cent to the rest of the world. These findings confirm the international nature of the Dutch multinationals. This paper complements the previous findings on institutional ownership of large Dutch companies and shareholder engagement (Tupitcyna, 2018a; 2018b).

The report is structured as follows: the first section describes the methodology for the analysis, with a focus on data sources and the criteria applied. The second section presents an explanation for the results obtained. The third and last section underlines the implications of the data for investors.

2 Data sources and analysis

The data collected refers to the geographic segmentation patterns of the twenty-five AEX constituents as of December 31, 2017. The date is selected to guarantee an equal comparison across a range of sources, especially the annual reports of the companies.

The information is retrieved on a per-company basis, with investor relations websites serving as the prime input source. The analysis is conducted by screening annual reports, investor presentations, and additional materials related to operations to combine the information on segmentation patterns.

In order to verify the completeness of the information retrieved, two additional data sources are consulted, namely Bloomberg and Thomson Reuters Eikon. These two providers use the same input sources (i.e. company reports) for segment data. However, the format of the output differs in both cases depending on the aggregation criteria used. Therefore, in the context of this report the data provided by Thomson Reuters and Bloomberg have been used for a robustness check only. The advantage of retrieving data for each company separately through an in-depth analysis of reports is that the results do not suffer from possible limitations and/or ad-hoc adjustments of the commercial databases.

The segment data analysed consist primarily of geographic composition of revenues, employee location, and assets distribution. In addition, data on ownership by location is observed. Due to variation of reporting standards on these metrics from company to company, revenues have been chosen as the main indicator to guarantee consistency in the analysis of company geographic distribution. This is in line with best-practice approaches of previous research on geographic segmentation of multinational companies, such as Sullivan (1994). It should be noted that the cost exposure to the Netherlands might be (slightly) higher than the revenue exposure, because of head offices and production centres in the Netherlands.

A challenge of analysing geographic segmentation is lack of sufficiently detailed data. Looking at revenues, the companies report their data with varying degrees of specification, with some companies providing more detailed segment information in appendixes of reports and others providing only some additional details to their income statement.

Table 1 and 2 show the results of data analysis. Before presenting the outcomes, we highlight certain aspects about the composition of the data.

In order to compare sales data on an equal level, gross amounts were used. One additional consideration related to reporting is to choose sales figures by destination rather than by origin whenever both options are available.

As for the segments, these have been divided into Netherlands, Rest of Europe, and Rest of World, with 'Rest of Europe' including also Russia and Eastern Europe but excluding Africa. This step is necessary to reconcile the differences between those companies reporting sales figures at EMEA level and those following different standards. Whenever data points are not available, the analysis follows a conservative approach. Therefore, the data related to a small fraction of the companies for which information was not readily available is presented in the tables as an estimate of their minimum geographic segmentation. For completeness, the discrepancies are reported in the footnotes to the segment tables.

The choice of the segments follows the logic of showing the exposure of these companies to different locations in order of proximity (home, region, world), in line with previous research on cross-border operations (Schoenmaker and Oosterloo, 2005). For this purpose, segment data, which are characterised by heterogeneity across the sample, have been disaggregated from the regional divisions each company presented and re-aggregated according to the three geographic segments chosen for this analysis.

3 Results

The outcomes of the analysis are presented in Table 1 and Table 2. Further information on estimates is provided in the footnotes.

1. Total revenues

This metric is a direct indicator of the size of a company's operations. Based on gross reported revenues, the average AEX company generated EUR 33.2 billion in revenues for 2017. Table 1 shows that Royal Dutch Shell, which is the largest company by market capitalisation, also generates the largest revenues at EUR 305.2 billion, whereas the smallest company, Galapagos NV, has a total of EUR 127 million revenues.

2. Segment distribution

Table 2 indicates that the AEX index stocks generate on average 20.6 per cent of their revenues in the Netherlands, while 31.6 per cent of their total revenues can be attributed to Rest of Europe and 47.9 per cent to the Rest of World segment. This is an arithmetic average of the 25 AEX companies.

Looking at Table 1, it is possible to notice that the exposure to the three segments varies consistently across companies. In general, the largest companies by market capitalisation are the ones that appear as the most diversified across different regions. This is especially the case for the three largest companies, namely Royal Dutch Shell, Unilever, and ASML. Overall, data on sales shows that over these 25 companies, only three smaller companies show a dominant exposure (>66%) to the Dutch market. These are ABN AMRO, ASR, and KPN.

Moreover, if we observe again the statistics at portfolio level as presented in Table 2, we see that using market weighted averages, the distribution of revenues appears even more diversified. The Netherlands represents now 10.6 per cent of portfolio total revenues, that is 10 per cent less than in the arithmetic average figures. The share of Rest of Europe is also lower at 29.6 per cent, while Rest of World now accounts for 59.9 per cent of total revenues.

This market-weighted average reflects the geographic exposure of an investor, which invests x per cent in all AEX companies (i.e. takes a position of x per cent of the market capitalisation of each AEX company). In our earlier paper on institutional ownership (Tupitcyna, 2018a), we found that the two largest Dutch pension funds, ABP and PFZW, hold about 0.7 per cent of the large-cap Dutch

companies, while total holdings of Dutch institutional investors amount to 1.4 per cent.

3. Netherlands segment

As reported in Table 1, the Dutch market constitutes a small fraction of total revenues for the majority of the 25 companies in the AEX index. The same pattern has been observed for the other parameters not reported in the final results, namely employee and asset geographic distribution. To put this in perspective, 13 out of the 25 companies have less than 5 per cent of their total revenues attributed to the Netherlands. The reason for the large variation in revenue diversification across the index constituents is related to business model considerations. As a matter of fact, the above mentioned three companies that are more reliant on the Dutch market consist of two financial institutions and one telecommunications & media company with few (KPN, ABN AMRO) or no operations (ASR) outside of the Netherlands.

4 Discussion

The data presented in this report highlights two conclusions. First, the companies present in the AEX index exhibit diversified global operations. Second, only a small fraction of the companies is largely reliant on their Dutch operations, whereas the majority of the stocks shows a small exposure to the Dutch economy.

The degree of diversification is evident from the data on revenue by segment over total revenues. Using market weighted averages, the average firm derives about 10 per cent of sales from the Netherlands, with a balanced exposure to other European markets (30 per cent) and other global markets (60 per cent). The figure for the Netherlands is likely to be even lower, as for certain data points it was necessary to include revenues in adjacent countries in the 'home' Dutch market (e.g. Unilever).

The results presented imply that, in line with academic theory, the risk exposure of the portfolio to a particular economic environment is lower than expected. This is good news for investors: the globally diversified nature of the companies' operations indicates that it might be possible to select a concentrated portfolio without experiencing the downside of increased risk exposure to a common factor. If a large Dutch pension fund were to invest 10 per cent of its equity and convertible bonds portfolio in Dutch companies, its actual exposure to the Dutch economy would only be 1 per cent.

5 Tables

1. Table 1¹

#	Company	Market Capitalisation (31 December 2017, €m)	Total Revenue (€m)	Revenue Segmentation (in % of total revenues)		
				Netherlands	Rest of Europe	Rest of world
1	Aalberts*	4,667	2,694	25%	44%	31%
2	ABN AMRO	12,668	9,290	78%	11%	11%
3	Aegon	11,087	32,973	14%	38%	49%
4	Kon, Ahold Delhaize	22,860	62,890	22%	17%	61%
5	Akzo Nobel	18,446	9,612	3%	39%	58%
6	Altice NV	14,071	23,500	0%	53%	47%
7	ArcelorMittal SA	27,582	68,679	2%	47%	51%
8	ASML Holding NV	62,627	9,053	1%	9%	90%
9	ASR Nederland	5,043	3,920	100%	0%	0%
10	Koninklijke DSM NV	14,454	8,632	4%	31%	66%
11	Galapagos NV	4,023	127	0%	35%	65%
12	Gemalto NV**	4,476	2,972	2%	44%	54%
13	Heineken NV***	50,072	21,908	4%	41%	55%

* Netherlands = Benelux, Nordics, UK.

** Netherlands = estimated based on average revenue per country in EMEA, adjusted for upward estimate (+15%) on core EU countries.

*** Netherlands = estimated based on average revenue per FTE per country in EMEA, adjusted downward for higher presence of FTEs due to headquarters.

**** Netherlands = estimated based on average revenue per petrol station in Europe. Added figure to revenue share (50%) of Joint Venture NAM gas revenues.

***** Netherlands = includes U.K. figures (home markets of Unilever).

14	ING Groep NV	59,549	17,773	32%	53%	15%
15	Koninklijke KPN NV	12,222	6,498	89%	1%	10%
16	NN Group NV	12,308	17,816	58%	24%	18%
17	Koninklijke Philips NV	29,676	17,780	2%	19%	79%
18	Signify NV	4,376	6,965	8%	25%	67%
19	Randstad NV	9,390	23,273	14%	54%	31%
20	Relx NV	40,321	8,385	1%	22%	77%
21	Royal Dutch Shell PLC ****	233,561	305,179	3%	30%	67%
22	Unibail Rodamco SE	20,967	1,583	4%	96%	0%
23	Unilever NV *****	137,754	53,715	7%	17%	76%
24	Koninklijke Vopak NV	4,675	1,306	36%	14%	50%
25	Wolters Kluwer NV	12,623	4,422	4%	27%	69%

Sources: Company reports, Author's Analysis, Thomson Reuters Eikon, Bloomberg

2. Table 2

Metric	Revenue Segmentation (as % of total)		
	Netherlands	Rest of Europe	Rest of world
Average	20.6%	31.6%	47.9%
Market weighted average	10.6%	29.6%	59.9%
Median	4.4%	29.8%	53.8%

Sources: Company reports, Author's Analysis, Thomson Reuters Eikon, Bloomberg

6 References

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