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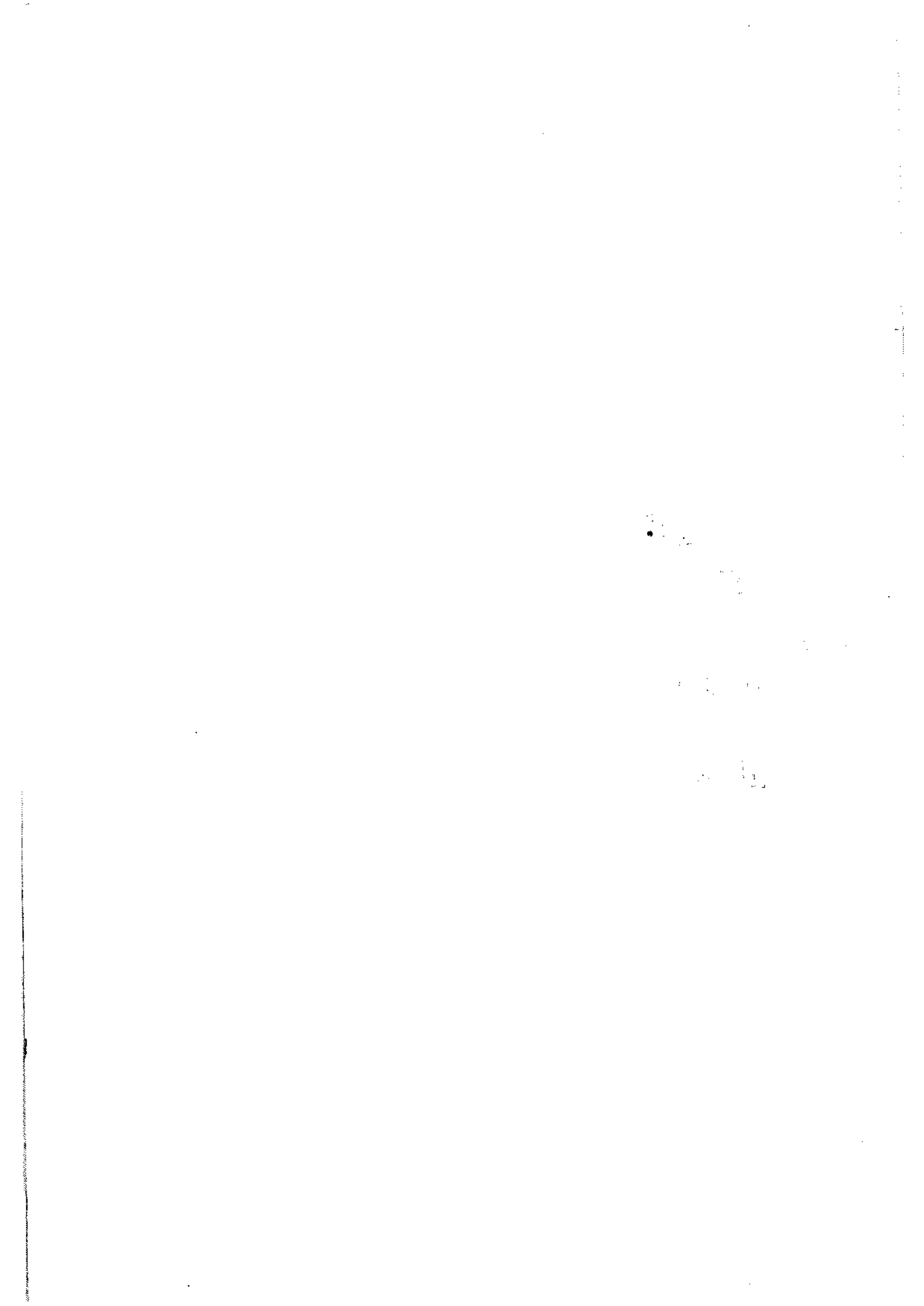
Serie Research Memoranda

The Use and Perceived Importance of Annual Reports
by Investment Analysts in the Netherlands

R.G.A. Vergoossen

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The Use and Perceived Importance of Annual Reports

by Investment Analysts in the Netherlands

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The author would welcome comments on this paper. Its contents should be treated as preliminary. Please do not quote or cite without the permission of the author. Contact address:

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1 Introduction¹



With respect to the parties having an interest in the performance of a company a number of categories can be distinguished, for example shareholders, bankers, investment analysts, suppliers, customers, employees and competitors. One of the sources for gaining insight into the performance of a company is the financial information provided by the company itself. The most prominent users of that information are shareholders, bankers and investment analysts.

Shareholders interpret accounting numbers as an input to investment decisions, whereas bankers have to assess the creditworthiness of corporations. Investment analysts often function as an intermediary between the companies as providers of financial information and the other users of financial information. They gather, analyse and interpret accounting numbers and disseminate their results. Many investment decisions are particularly based on the findings and interpretations of investment analysts. Financial information that may mislead an investment analyst may result in misleading the people who rely on the findings and interpretations of that investment analyst too. This makes investment analysts a very interesting user category to study.

This paper contains the preliminary findings of an investigation into the investment analysts' use and perceived importance of annual reports. This study forms the first part of a research project on the influence of accounting choice and accounting change on the decisions or judgments of investment analysts. Before such an examination can take place, one should know more about the position of the annual report in investment analysis. Thus the purpose of this paper is to gain some insight into the use of annual reports by investment analysts and the position of the (elements of the) annual report in the investment analysts' spectrum of information sources. In addition, the results can be used to select investment analysts suitable for participation in the next part of the research project. In view of this questionnaires were sent to the members of the Dutch Association of Investment Analysts (Vereniging van Beleggingsanalisten; VBA). A study into the use and perceived importance of annual reports by investment analysts has never taken place in the Netherlands, though this kind of study has been done abroad.

In the next section the research design is set out. In sections 3, 4 and 5 we present some research findings. Comparisons with results of similar studies are outlined in section 6. The final section contains concluding remarks.

2 Research Design

The investigation was held among the members of the Dutch Association of Investment Analysts by means of a written inquiry. In May 1991 the membership roll amounted to 506 members.

In June a pilot study was carried out among the first 56 members mentioned on the membership roll. The purpose of the pilot study was to test the questions and to find out if enough investment analysts were prepared to complete the questionnaire. The response rate was adequate (51.8 per cent).² In November 1991 a revised questionnaire was mailed to the other 450 members followed by a second mailing in January 1992 to those who had failed to respond.³ The investigation (including the pilot study) produced 225 responses, 215 of them usable, yielding a response rate of 43.0 per cent of the questionnaires mailed.⁴

The questionnaire consisted of three parts. Part I contained questions about the kind of organization the investment analysts work for, the kind of job they perform, the method(s) of analysis they use, the extent to which annual reports are studied and the reasons for the investment analysts' interest in annual reports. Part II asked for the views on the importance of different information sources available to investment analysts, the views on the importance of different parts of the annual report, the views on the importance of different information items supplied in the footnotes to the financial statements, the views on the importance of different information items rarely supplied in the annual report and the views on the importance of comparability of annual reports between companies. Respondents were asked to answer these questions using a five-point scale (1: very important, 2: important, 3: of some importance, 4: not very important, 5: not important at all). Part II also asked for the respondents' opinion concerning the quality of the information in the annual reports of Dutch companies with respect to accounting changes, the suitability of annual reports to supply information about future developments and the desirability of limiting the freedom of companies to choose their

accounting methods. Finally, in part III the respondents were enabled to comment on the investigation.

3 Investment Analysts and Methods of Analysis

The first question in part I of the questionnaire was about the kind of organization the investment analysts work for. Table 1 shows the organizations which were distinguished in the questionnaire. From this table it can be concluded that banking-institutions are by far the most important employers of the respondents.

Table 1: Organizations in which respondents work

	#	%
Bank	102	49.8
Insurance company	13	6.3
Pension fund	36	17.5
Investment company	12	5.9
Investment consultancy company	19	9.3
Other organizations	23 ^a	11.2
	—	—
	205	100.0
Retired respondents	10 ^b	
	—	
Total	215	

^a Three respondents who ticked or mentioned more than one organization are included.

^b Not included in the calculation of percentages.

The investment analysts were asked about the function they performed. Table 2 shows that the majority of the active respondents works as an investment analyst/adviser or portfolio manager. Another important category is formed by the respondents who characterized themselves as a director or as a head of department.

Table 2: Functions of the respondents

	#	%
Investment analyst/adviser ^a	67	32.7
Portfolio manager	60	29.3
Account manager	6	2.9
Director/head of department	32	15.6
Other functions	40 ^b	19.5
	<hr/>	<hr/>
	205	100.0
Retired respondents	10 ^c	
	<hr/>	
Total	215	

^a To distinguish from the entire population of investment analysts, the respondents that characterized themselves as an investment analyst or investment adviser are termed investment advisers.

^b Fifteen respondents who ticked or mentioned more than one function are included.

^c Not included in the calculation of percentages.

In all 150 (73.2 per cent) of the 205 active respondents are engaged in company analysis. The remaining 55 respondents (26.8 per cent) are not engaged in company analysis. If we distinguish between the three main categories of investment analysts, it appears that 91.0 per cent of the investment advisers, 68.3 per cent of the portfolio managers and 50.0 per cent of the directors/heads are engaged in company analysis. As the next table shows it is plausible that there is a relation between the respondent's function and the involvement in company analysis.

Table 3: Function of respondents and company analysis

	Investment advisers	Portfolio managers	Directors/heads	Other functions	Row total
Engaged in company analysis	61 (49.0)	41 (43.9)	16 (23.4)	32 (33.7)	150
Not engaged in company analysis	6 (18.0)	19 (16.1)	16 (8.6)	14 (12.3)	55
Column total	67	60	32	46	205
The expected values are in parentheses.					
Chi-square (Pearson):	20.675				
Degrees of freedom:	3				
Significance:	0.000				

In the literature a number of analysis methods are distinguished. The most

important methods are fundamental analysis, ratio analysis, technical analysis and β -analysis. Fundamental analysis can be described as the analysis of such fundamental factors as general business conditions, industry outlook, earnings, dividends, quality of management, et cetera. A definition of ratio analysis is the breakdown of the examined financial reports into component parts which are evaluated in relation to each other and to exogenous standards. Technical analysis is an analysis of market-based factors such as share price movements, charts and the like. When applying β -analysis one analyses the responsiveness of the price of a particular company's share to changes in the value of some market average. It is obvious that annual reports play a different role in the different methods of analysis; when using ratio analysis one relies more on accounting numbers than when using fundamental analysis. When applying technical analysis and β -analysis, on the other hand, accounting numbers are of minor importance.

Table 4 shows to what extent the different methods of analysis are applied by the respondents engaged in company analysis. Very outstanding is the high degree in which fundamental analysis is applied; 89.8 per cent of the respondents engaged in company analysis use this method to some extent. Ratio analysis is applied by 44.9 per cent, technical analysis by 18.9 and β -analysis by 16.5 per cent. Moreover, table 4 shows that many respondents do not confine themselves to the application of only one analysis method, but that they use a mixture of methods.

If the different functions the respondents hold are related with the methods of analysis applied, it appears that the use of fundamental analysis is most widespread, followed by ratio analysis. Furthermore, it is obvious that β -analysis is applied more often by portfolio managers than by investment advisers and directors/heads.

Table 4: Methods of analysis applied^a

	Total		Investment advisers	Portfolio managers	Directors/heads
	#	%	%	%	%
Fundamental analysis	114	89.8	100.0	85.7	73.3
Ratio analysis	57	44.9	42.3	54.3	46.7
Technical analysis	24	18.9	15.4	20.0	13.3
β-analysis	21	16.5	7.7	25.7	13.3
Other analysis methods	11	8.7	5.8	5.7	20.0
No answer	3	2.4	0.0	5.7	0.0

^a The question about the methods of analysis used was answered by 124 respondents. This question was not included in the pilot study.

At the end of this section an overview of the years of experience in company analysis in table 5.

Table 5: Years of experience in company analysis

	#	%
5 years or less	33	22.0
6 - 10 years	46	30.7
11 - 15 years	23	15.3
16 - 20 years	25	16.7
21 - 25 years	12	8.0
26 years and over	11	7.3
Total	150	100.0

4 Use of Annual Reports

Table 6 shows that almost every respondent engaged in company analysis uses annual reports, whereas roughly half of the respondents not engaged in company analysis do. On the basis of these results one may conclude that investment analysts do use annual reports when performing company analysis.

Table 6: Company analysis and the use of annual reports

	Engaged in company analysis	Not engaged in company analysis	Row total
Use of annual reports	148 (128.0)	27 (47.0)	175
No use of annual reports	2 (22.0)	28 (8.0)	30
Column total	150	55	205
The expected values are in parentheses.			
Chi-square (Pearson, after Yates' correction):		75.256	
Degrees of freedom:		1	
Significance:		0.000	

Having determined that the greater part of the investment analysts use annual reports, it is interesting to know more about their purposes and the intensity in which they study annual reports. Table 7 shows to what extent the different purposes mentioned in the questionnaire were ticked by the respondents. It appears that 73.0 per cent of the investment advisers study annual reports in order to underpin their advice and that 74.5 per cent of the portfolio managers base their investment decisions to a greater or lesser extent on the information supplied in annual reports. Furthermore, it is obvious that the directors/heads use annual reports especially as a way to orient themselves about companies.

Table 7: Purposes of studying annual reports

	Total		Investment advisers	Portfolio managers	Directors/heads
	#	%	%	%	%
General orientation	68	38.9	31.7	41.2	59.1
Investment decisions	96	54.9	46.0	74.5	40.9
Credit decisions	8	4.6	3.2	2.0	9.1
Investment advice	65	37.1	73.0	5.9	22.7
Information supply	13	7.4	11.1	0.0	0.0
Other Purposes	18	10.3	1.6	2.0	18.2

Table 8 gives some insight into how closely the respondents study annual reports. It appears that the mean time spending of a significant number of

respondents (42.8 per cent) lies between one and four hours per annual report; 30.9 per cent of the respondents spend less than one hour per annual report.

Table 8: Mean time spending per annual report^a

	#	%
Less than 1 hour	47	30.9
1 - 1.99 hours	34	22.4
2 - 3.99 hours	31	20.4
4 - 7.99 hours	20	13.2
8 hours and over	19	12.5
No answer	1	0.6
Total	152	100.0

^a The question about the mean time spending per annual report was not included in the pilot study.

The overall average time spending per annual report is 2.90 hours (standard deviation 3.76). It appears that the average time spending per annual report by investment advisers is 5.21 hours (standard deviation 4.93), whereas the average time spending per annual report by portfolio managers is 1.11 hours (standard deviation 1.36) and by directors/heads 1.53 hours (standard deviation 2.08). A Mann-Whitney test was applied, to check if the differences in time spending per annual report were significant.⁵ As the following table shows, the differences between the investment advisers on the one hand and the portfolio managers and directors/heads on the other are significant. The differences between the portfolio managers and the directors/heads are not significant.

Table 9: Function of respondents and time spending per annual report

Groups of respondents	U	Two-tailed P-value
Investment advisers : portfolio managers	246.5	0.000*
Investment advisers : directors/heads	169.5	0.000*
Portfolio managers : directors/heads	385.5	0.213

* Significant at 1 per cent level

Table 10 gives an overview with respect to the total number of annual reports studied every year. Most respondents (52.0 per cent) study 11 - 30 annual reports annually. Furthermore, it is interesting to note that 76.0

per cent of the respondents do not confine themselves to annual reports of Dutch companies; they study annual reports of foreign companies too. Indeed, for 34.3 per cent of the respondents the annual reports of foreign companies constitute half or more of the total number of annual reports studied.

Table 10: Total number of annual reports studied every year

	#	%
10 annual reports or fewer	17	9.7
11 - 20 annual reports	51	29.1
21 - 30 annual reports	40	22.9
31 - 40 annual reports	18	10.3
41 - 50 annual reports	18	10.3
51 - 100 annual reports	15	8.6
101 annual reports and over	14	8.0
No answer	2	1.1
Total	175	100.0

On average the respondents study about 45 annual reports every year (standard deviation 57.82). The results of the Mann-Whitney test show that statistically there is no significant difference in the number of annual reports studied between the various groups of respondents (see next table).

Table 11: Function of respondents and number of annual reports studied

Groups of respondents	U	Two-tailed P-value
Investment advisers : portfolio managers	1478.5	0.552
Investment advisers : directors/heads	659.5	0.818
Portfolio managers : directors/heads	558.5	0.976

Furthermore, it was asked in what branches of industry the companies are involved whose annual reports are studied. In the questionnaire 17 branches of industry were distinguished. By looking at the number of branches of industry ticked by the respondents one can gain some insight into the extent to which the respondents are specialized. It appears that 58.5 per cent of the respondents ticked more than half of the branches of industry mentioned in the questionnaire; 25.0 per cent even ticked all the branches of industry (see table 12).

Table 12: Number of branches of industry in which companies are analysed^a

	#	%
1 - 4 branches of industry	23	15.1
5 - 8 branches of industry	39	25.7
9 - 12 branches of industry	33	21.7
13 - 16 branches of industry	18	11.8
all (17) branches of industry	38	25.0
No answer	1	0.7
Total	152	100.0

^a The question about the branches of industry was not included in the pilot study.

The average number of branches of industry ticked by the respondents is about 10 (standard deviation 5.376). The results of the Mann-Whitney test (table 13) show that statistically there are no significant differences in this respect between the three groups of respondents.

Table 13: Function of respondents and number of branches of industry in which companies are analysed

Groups of respondents	U	Two-tailed P-value
Investment advisers : portfolio managers	964.0	0.101
Investment advisers : directors/heads	833.0	0.582
Portfolio managers : directors/heads	666.0	0.601

5 Perceived Importance of Annual Reports

Part II of the questionnaire asked for the views of the investment analysts on the importance of different information sources and information elements. In analyzing the respondents' perceived importance four sections were distinguished:

- Information sources available to investment analysts,
- Parts of the annual report,
- Specific information items supplied in the footnotes,
- Specific information items often not supplied in the annual report.

Information sources available to investment analysts

The investment analysts were asked to give their view on the importance of the following information sources on a five-point scale:

- Most recent annual report,
- Annual reports of former years,
- Interim reports,
- Offering prospectuses,
- Newspapers and magazines,
- Press releases from company,
- Communications with management,
- Reports of other investment analysts,
- Industry statistics,
- Macro-economic indicators.

The results are presented in table 14. The percentages of respondents rating the different information sources 1 or 2 and the mean rating values are given in separate columns. These can be used as criteria for ranking the information sources in order of perceived importance. Table 14 shows that on the basis of both criteria the respondents rate the most recent annual report as their most important source of information. Communications with management and interim reports are ranked second and third respectively. Annual reports of former years, industry statistics and reports of other investment analysts have the lowest ratings. Nevertheless, these information sources are considered to be (very) important by 53.7, 52.6 and 46.3 per cent of the respondents respectively.

Table 16 displays the results of the Student-Newman-Keuls multiple range test (SNK-test) on the importance of information sources available to investment analysts.⁶ It appears that the importance attached by the respondents to the most recent annual report is significantly higher statistically than any of the other information sources rated. The SNK-test does not establish the difference in mean ratings between communications with management and interim reports as significant. However, the differences between the mean ratings of these two sources and that of any of the remaining seven sources are statistically significant.

In table 15 the mean ratings of three categories of investment analysts are compared with each other. It appears that the differences are most obvious between the investment advisers and the portfolio managers. With the exception of the reports of other investment analysts, all information sources are considered to be equally or less important by the portfolio managers compared with the investment advisers. Reports of other investment analysts are ranked third by the portfolio managers, whereas this informa-

tion source is ranked last by the investment advisers. Clearly portfolio managers rely more on the reports of colleagues than investment advisers do.

Table 14: Perceived importance of information sources available to investment analysts

	1 Very important		2 Important		3 Of some importance		4 Not very important		5 Not important at all		6 Total		7 ^a (1 + 2)	8 ^a Mean rating	9 Standard deviation
	#	%	#	%	#	%	#	%	#	%	#	%	%		
Most recent annual report	125	71.4	33	18.9	13	7.4	4	2.3	0	0.0	175	100.0	90.3 (1)	1.406 (1)	0.728
Annual reports of former years	17	9.7	77	44.0	44	25.1	26	14.9	11	6.3	175	100.0	53.7 (8)	2.640(10)	1.051
Interim reports	82	46.9	56	32.0	30	17.1	5	2.9	2	1.1	175	100.0	78.9 (3)	1.794 (3)	0.905
Offering prospectuses	65	37.1	57	32.6	33	18.9	16	9.1	4	2.3	175	100.0	69.7 (5)	2.069 (4)	1.065
Newspapers and magazines	56	32.0	62	35.4	44	25.1	10	5.7	3	1.7	175	100.0	67.4 (6)	2.097 (6)	0.975
Press releases from company	54	30.9	72	41.1	35	20.0	9	5.1	5	2.9	175	100.0	72.0 (4)	2.080 (5)	0.985
Communications with management	117	66.9	25	14.3	20	11.4	8	4.6	5	2.9	175	100.0	81.2 (2)	1.623 (2)	1.043
Reports of other investment analysts	29	16.6	52	29.7	70	40.0	20	11.4	4	2.3	175	100.0	46.3(10)	2.531 (8)	0.975
Industry statistics ^b	23	15.1	57	37.5	44	28.9	24	15.8	4	2.6	152	100.0	52.6 (9)	2.533 (9)	1.016
Macro-economic indicators ^b	31	20.4	58	38.2	42	27.6	13	8.6	8	5.3	152	100.0	58.6 (7)	2.401 (7)	1.069

^a In parentheses the rank of the different information sources.

^b This information source was not included in the pilot study.

Table 15: T-tests for differences in the mean ratings between three groups of investment analysts concerning the information sources

	Investment advisers (N 1)	Portfolio managers (N 2)	Directors/ heads (N 3)	N 1 : N 2		N 1 : N 3		N 2 : N 3	
				T	P ^a	T	P	T	P
Most recent annual report	1.254	1.725	1.409	-3.15	0.002**	-0.90	0.374	1.55	0.128
Annual reports of former years	2.460	2.902	2.909	-2.22	0.029*	-1.77	0.084	-0.03	0.979
Interim reports	1.556	1.980	2.136	-2.73	0.007**	-2.13	0.043*	-0.54	0.590
Offering prospectuses	1.905	2.373	2.000	-2.34	0.022*	-0.35	0.727	1.26	0.216
Newspapers and magazines	2.000	2.039	2.500	-0.22	0.824	-2.11	0.043*	-1.77	0.084
Press releases from company	1.841	2.196	2.273	-2.03	0.045*	-1.80	0.081	-0.31	0.759
Communications with management	1.317	1.863	1.591	-2.92	0.005**	-1.13	0.268	0.98	0.333
Reports of other investment analysts	2.921	1.941	2.682	5.89	0.000**	1.02	0.314	-3.18	0.003**
Industry statistics	2.315	2.667	2.381	-1.78	0.078	-0.26	0.798	1.14	0.264
Macro-economic indicators	2.444	2.444	2.524	0.00	1.000	-0.27	0.786	-0.26	0.796

^a P: Two-tailed P-value.

* Significant at 5 per cent level

** Significant at 1 per cent level

Table 16: Student-Newman-Keuls multiple range test for differences in the mean ratings between the different information sources

<u>Information sources</u>	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	<u>Mean differences</u>
(A) Most recent annual report	0.217*	0.388*	0.663*	0.674*	0.691*	0.995*	1.125*	1.127*	1.234*	
(B) Communications with management		0.171	0.446*	0.457*	0.474*	0.778*	0.908*	0.910*	1.017*	
(C) Interim reports			0.275*	0.286*	0.303*	0.607*	0.737*	0.739*	0.846*	
(D) Offering prospectuses				0.011	0.028	0.332*	0.462*	0.464*	0.571*	
(E) Press releases from company					0.017	0.321*	0.451*	0.453*	0.560*	
(F) Newspapers and magazines						0.304*	0.434*	0.436*	0.543*	
(G) Macro-economic indicators							0.130	0.132	0.239	
(H) Reports of other investment analysts								0.002	0.109	
(I) Industry statistics									0.107	
(J) Annual reports of former years										

*: Significant at 5 percent level

<u>Means</u>	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	1.406	1.623	1.794	2.069	2.080	2.097	2.401	2.531	2.533	2.640

┌─┐: Difference between mean values not significant

Parts of the annual report

Having established that investment analysts use annual reports, we now look at the relative importance of different parts of the annual report. We presented the investment analysts the following list of items:

- Report of management board,
- Report of supervisory board,
- Consolidated balance sheet,
- Parent company's balance sheet,
- Consolidated income statement,
- Parent company's income statement,
- Funds statement,
- Notes to the financial statements,
- Historical summary of operations,
- Auditor's report.

Again we asked the investment analysts to give their view on the importance of the various items on a five-point scale. The results are presented in table 18. Both criteria, the percentages of respondents rating parts of the annual report as (very) important and the mean rating values, lead to very similar rankings of the different parts. The consolidated income statement is ranked first, followed by the consolidated balance sheet and the notes to the financial statements. The auditor's report and the report of the supervisory board have the lowest ratings.

Table 19 displays the results of the SNK-test on the importance of different parts of the annual report. It appears that the importance given by the respondents to the consolidated income statement and consolidated balance sheet is not statistically significant. The same applies to the consolidated balance sheet and the notes to the financial statements. But the differences between the mean ratings of the three most important parts and that of any of the remaining seven parts are statistically significant. Table 18 contains comparisons between the three main categories of investment analysts. It appears that the report of the management board is perceived to be more important by the directors/heads than by the other categories. Between the investment advisers and the portfolio managers the most significant differences in the perceived importance concern the consolidated income statement, the notes to the financial statements and the historical summary of operations.

Table 17: Perceived importance of parts of the annual report

	1 Very important		2 Important		3 Of some importance		4 Not very important		5 Not important at all		6 Total		7 ^a (1 + 2)	8 ^a Mean rating	9 Standard deviation
	#	%	#	%	#	%	#	%	#	%	#	%	%		
Report of management board	74	42.3	57	32.6	31	17.7	12	6.9	1	0.6	175	100.0	74.9 (4)	1.909 (4)	0.961
Report of supervisory board	4	2.3	13	7.4	50	28.6	67	38.3	41	23.4	175	100.0	9.7(10)	3.731(10)	0.978
Consolidated balance sheet	109	62.3	47	26.9	17	9.7	2	1.1	0	0.0	175	100.0	89.2 (2)	1.497 (2)	0.718
Parent company's balance sheet	20	11.4	39	22.3	66	37.7	35	20.0	15	8.6	175	100.0	33.7 (8)	2.920 (7)	1.106
Consolidated income statement	128	73.1	37	21.1	9	5.1	1	0.6	0	0.0	175	100.0	94.2 (1)	1.331 (1)	0.601
Parent company's income statement	26	14.9	33	18.9	60	34.3	38	21.7	18	10.3	175	100.0	33.8 (7)	2.937 (8)	1.190
Funds statement	52	29.7	71	40.6	39	22.3	9	5.1	4	2.3	175	100.0	70.3 (5)	2.097 (5)	0.963
Notes to the financial statements	96	54.9	56	32.0	19	10.9	4	2.3	0	0.0	175	100.0	86.9 (3)	1.606 (3)	0.772
Historical summary of operations	52	29.7	56	32.0	47	26.9	17	9.7	3	1.7	175	100.0	61.7 (6)	2.217 (6)	1.033
Auditor's report	27	15.4	25	14.3	43	24.6	44	25.1	36	20.6	175	100.0	29.7 (9)	3.211 (9)	1.342

^a In parentheses the rank of the different parts of the annual report.

Table 18: I-tests for differences in the mean ratings between three groups of investment analysts concerning the parts of the annual report

	Investment advisers (N 1)	Portfolio managers (N 2)	Directors/ heads (N 3)	N 1 : N 2		N 1 : N 3		N 2 : N 3	
				T	P ^a	T	P	T	P
Report of management board	1.857	2.137	1.455	-1.48	0.141	2.38	0.020*	3.90	0.000**
Report of supervisory board	3.873	3.647	3.591	1.39	0.169	1.04	0.305	0.20	0.844
Consolidated balance sheet	1.397	1.686	1.455	-2.11	0.037*	-0.32	0.750	1.22	0.230
Parent company's balance sheet	3.127	2.745	2.636	1.93	0.057	1.71	0.097	0.36	0.721
Consolidated income statement	1.159	1.588	1.364	-3.73	0.000**	-1.39	0.177	1.28	0.207
Parent company's income statement	3.206	2.725	2.545	2.28	0.025*	2.25	0.031*	0.59	0.561
Funds statement	2.048	2.255	2.182	-1.13	0.260	-0.55	0.588	0.29	0.777
Notes to the financial statements	1.397	1.863	1.591	-3.53	0.001**	-1.06	0.299	1.34	0.189
Historical summary of operations	2.524	1.843	2.227	3.73	0.000**	1.21	0.235	-1.58	0.122
Auditor's report	3.540	3.176	3.000	1.53	0.128	1.60	0.118	0.52	0.608

^a P: Two-tailed P-value.

* Significant at 5 per cent level

** Significant at 1 per cent level

Table 19: Student-Newman-Keuls multiple range test for differences in the mean ratings between the different parts of the annual report

<u>Parts of the annual report</u>	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
(A) Consolidated income statement	0.166	0.275*	0.578*	0.766*	0.886*	1.589*	1.606*	1.880*	2.400*	<u>Mean differences</u>
(B) Consolidated balance sheet		0.109	0.412*	0.600*	0.720*	1.423*	1.440*	1.714*	2.234*	
(C) Notes to the financial statements			0.303*	0.491*	0.611*	1.314*	1.331*	1.605*	2.125*	
(D) Report of management board				0.188	0.308*	1.011*	1.028*	1.302*	1.822*	
(E) Funds statement					0.120	0.823*	0.840*	1.114*	1.634*	
(F) Historical summary of operations						0.703*	0.720*	0.994*	1.514*	
(G) Parent company's balance sheet							0.017	0.291*	0.811*	
(H) Parent company's income statement								0.274*	0.794*	
(I) Auditor's report									0.520*	
(J) Report of supervisory board										

*: Significant at 5 percent level

<u>Means</u>	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	1.331	1.497	1.606	1.909	2.097	2.217	2.920	2.937	3.211	3.731

┌──┐: Difference between mean values not significant

Specific information items supplied in the footnotes

The investment analysts were asked to give their view on the importance of a number of information items supplied in the footnotes. The following information items were distinguished:

- Valuation principles,
- Consolidation principles,
- Change(s) of valuation principles,
- Impact of change(s) of valuation principles on presented figures,
- Change(s) of consolidation principles,
- Impact of change(s) of consolidation principles on presented figures,
- Sales by branch of industry,
- Sales by geographic segment,
- Off-balance sheet liabilities,
- Profit appropriation.

The results, shown in table 20, indicate that the valuation principles, changes of valuation principles and the impact of these changes on the presented figures are considered to be the most important information items in the footnotes. It is interesting in this context that 43.0 per cent of the respondents qualified the information about accounting changes supplied in the annual reports of Dutch companies as moderate or bad.

Profit appropriation is considered to be the least important of the information items mentioned.

Table 20: Perceived importance of information items supplied (mainly) in the notes to the financial statements

	1 Very important		2 Important		3 Of some importance		4 Not very important		5 Not important at all		6 Total		7 ^a (1 + 2)	8 ^a Mean rating	9 Standard deviation
	#	%	#	%	#	%	#	%	#	%	#	%			
Valuation principles	101	57.7	51	29.1	15	8.6	7	4.0	1	0.6	175	100.0	86.8 (1)	1.606 (3)	0.850
Consolidation principles	77	44.0	58	33.1	29	16.6	9	5.1	2	1.1	175	100.0	77.1 (9)	1.863(8/9)	0.949
Change(s) of valuation principles	108	61.7	43	24.6	17	9.7	7	4.0	0	0.0	175	100.0	86.3(2/3)	1.560 (1)	0.827
Impact of change(s) of valuation principles on presented figures	105	60.0	46	26.3	19	10.9	5	2.9	0	0.0	175	100.0	86.3(2/3)	1.566 (2)	0.799
Change(s) of consolidation principles	85	48.6	56	32.0	26	14.9	8	4.6	0	0.0	175	100.0	80.6 (6)	1.754 (6)	0.872
Impact of change(s) of consolidation principles on presented figures	90	51.4	56	32.0	18	10.3	11	6.3	0	0.0	175	100.0	83.4 (4)	1.714 (4)	0.890
Sales by branch of industry	90	51.4	52	29.7	23	13.1	7	4.0	3	1.7	175	100.0	81.1 (5)	1.749 (5)	0.950
Sales by geographic segment	76	43.4	62	35.4	26	14.9	7	4.0	4	2.3	175	100.0	78.8 (8)	1.863(8/9)	0.967
Off-balance sheet liabilities	81	46.3	58	33.1	28	16.0	7	4.0	1	0.6	175	100.0	79.4 (7)	1.794 (7)	0.892
Profit appropriation	33	18.9	60	34.3	53	30.3	19	10.9	10	5.7	175	100.0	53.3(10)	2.503(10)	1.093

^a In parentheses the rank of the different information items.

Specific information items often not supplied in the annual report

Table 21 gives an overview of the perceived importance of information items which are often not or only very briefly supplied in the annual reports of Dutch companies.

The following information items were mentioned in the questionnaire:

- Sales revenue forecast for next year,
- Operating result forecast for next year,
- Net income forecast for next year,
- Dividends forecast for next year,
- Investments forecast for next year,
- Financing forecast for next year,
- Cash flow forecast for next year,
- Profit figures by branch of industry,
- Profit figures by geographic segment,
- Company's sensitivity for currency rate changes,
- Company's sensitivity for interest rate changes,
- Ratio between fixed and variable costs.

It is evident from the results presented in table 21 that all the items enumerated above are considered to be (very) important by a large majority of the respondents. With respect to prospective financial information about 68 per cent of the respondents are of the opinion that the annual report is a suitable medium to provide this information. On the other hand, almost 24 per cent of the respondents consider interim reports, press conferences, shareholders' meetings and the like more appropriate to supply prospective financial information.

At the end of part II of the questionnaire some questions were asked about the comparability of financial statements. According to about 85 per cent of the respondents it is (very) important to take into consideration the annual reports of other companies in the same branch of industry when analysing a company and that the information presented by these companies should be comparable. Approximately the same percentage of the respondents would like the present companies' freedom in the Netherlands to choose their accounting methods to be limited. The accounting standards in the Netherlands with respect to accounting choice and accounting change are liberal compared with other countries.

Table 21: Perceived importance of information items often not supplied in the annual report

	1 Very important		2 Important		3 Of some importance		4 Not very important		5 Not important at all		6 Total		7 ^a (1 + 2)	8 ^a Mean Rating	9 Standard deviation
	#	%	#	%	#	%	#	%	#	%	#	%			
Sales revenue forecast for next year	64	36.6	74	42.3	32	18.3	5	2.9	0	0.0	175	100.0	78.9 (7)	1.874 (8)	0.807
Operating result forecast for next year	88	50.3	70	40.0	14	8.0	3	1.7	0	0.0	175	100.0	90.3 (1)	1.611 (1)	0.709
Net income forecast for next year	89	50.9	55	31.4	24	13.7	6	3.4	1	0.6	175	100.0	82.3 (4)	1.714 (2)	0.870
Dividends forecast for next year	42	24.0	57	32.6	57	32.6	16	9.1	3	1.7	175	100.0	56.6(12)	2.320(12)	0.994
Investments forecast for next year	69	39.4	76	43.4	25	14.3	3	1.7	2	1.1	175	100.0	82.8 (3)	1.817 (4)	0.824
Financing forecast for next year	67	38.3	75	42.9	29	16.6	2	1.1	2	1.1	175	100.0	81.2 (6)	1.840 (6)	0.822
Cash flow forecast for next year	71	40.6	66	37.7	29	16.6	8	4.6	1	0.6	175	100.0	78.3 (8)	1.869 (7)	0.890
Profit figures by branch of industry	72	41.1	52	29.7	33	18.9	14	8.0	4	2.3	175	100.0	71.1(10)	2.006 (9)	1.064
Profit figures by geographic segment	63	36.0	54	30.9	41	23.4	12	6.9	5	2.9	175	100.0	66.9(11)	2.097(11)	1.060
Company's sensitivity for currency rate changes	75	42.9	77	44.0	20	11.4	1	0.6	2	1.1	175	100.0	86.9 (2)	1.731 (3)	0.775
Company's sensitivity for interest rate changes	67	38.3	76	43.4	29	16.6	2	1.1	1	0.6	175	100.0	81.7 (5)	1.823 (5)	0.786
Ratio between fixed and variable costs	58	33.1	68	38.9	38	21.7	8	4.6	3	1.7	175	100.0	72.0 (9)	2.029(10)	0.943

^a In parentheses the rank of the different information items.

6 Comparisons with Similar Studies

In this section the results of my study are compared with the results of other studies.

The results with respect to the methods of analysis used by the investment analysts are consistent with the results of the studies by Arnold and Moizer (1984) and Arnold, Moizer and Noreen (1984). They, too, found that the investment analysts do not confine themselves to the application of only one analysis method and that fundamental analysis is used most frequently and β -analysis least frequently.

Table 22 contains a comparison between the results of my study and the results of the Chang and Most study (1985) with respect to the ranking of different information sources. Chang and Most investigated, among other things, the investment analysts' perceived importance of information sources in the United States, the United Kingdom and New Zealand. In all cases the information sources are ranked using the average score on a five-point scale. Annual reports is the source with the most consistently high ranking of importance. It appears that annual reports is ranked first in the United States, New Zealand and the Netherlands and second in the United Kingdom. Communications with management is ranked first in the United Kingdom, second in the Netherlands and third in the United States and New Zealand. Newspapers and magazines and advisory services have a relatively low rating in all countries.

Table 22: *Intercountry ranking of information sources in order of relative importance*

	The Netherlands	United States	United Kingdom	New Zealand
Annual reports	1	1	2	1
Communications with management	2	3	1	3
Interim reports	3	4	4	2
Offering prospectuses	4	2	3	5
Press releases from company	5	6	6	4
Newspapers and magazines	6	7	5	6
Advisory services	7	5	7	7

For reasons of comparison the information sources that are not taken into consideration in both studies are excluded. With respect to the Chang and Most study it concerns 'proxy statements' and with respect to my study it concerns 'annual reports of former years', 'industry statistics' and 'macro-economic indicators'. 'Reports of other investment analysts' in my study is considered to be comparable with 'advisory services' in the Chang and Most study.

In the Chang and Most study the SNK-test is performed on the importance placed on information sources by the investment analysts in the United States. Contrary to my study they did not find a significant difference between the annual report and all the other sources; the differences between the three most important information sources - annual reports, offering prospectuses and communications with management - are not statistically significant.

Table 23 reports the rankings for 7 items included in annual reports. The income statement is the item with the most consistently high ranking of importance, followed by the balance sheet. The statement of changes in financial position has a relatively low rating in the Netherlands. Probably this is caused by the fact that the statements of changes in financial position presented by Dutch companies are often of an inferior quality. The auditor's report is ranked low in all countries.

Table 23: Intercountry ranking of parts of the annual report in order of relative importance

	The Netherlands	United States	United Kingdom	New Zealand
Income statement	1	1	1	1
Balance sheet	2	2	2	2
Accounting policies/Other footnotes	3	4	4	6
President's letter	4	7	5	5
Statement of changes in financial position	5	3	3	4
Summary of operations for the last 5 - 10 years	6	5	6	3
Auditor's report	7	6	7	7

For reasons of comparison the parts that are not taken into consideration in both studies are excluded. With respect to the Chang and Most study it concerns 'sales and income by product line', 'management's discussion and analysis of summary of operations', 'Form 10-K report' and 'pictorial material' and with respect to my study it concerns 'report of supervisory board', 'parent company's balance sheet' and 'parent company's income statement'. 'Report of management' and 'notes to the financial statements' in my study are considered to be comparable with 'president's letter' and 'accounting policies'/'other footnotes' respectively in the Chang and Most study.

In the Chang and Most study the SNK-test performed on the importance given to different parts of the annual report by investment analysts in the United States indicates that the difference between the income statement and the balance sheet is not statistically significant. This appears to be the same with the investment analysts in the Netherlands.

7 Concluding Remarks

Banking-institutions are by far the largest employers of the respondents. A majority of the respondents characterized themselves as an investment analyst/adviser or portfolio manager. About three out of four respondents are engaged in company analysis. Mostly they do not confine themselves to the application of only one analysis method; instead a mixture of methods is used. It appears that the use of fundamental analysis is most widespread followed by ratio analysis. β -analysis is applied more often by portfolio managers than by investment advisers.

Almost every respondent engaged in company analysis is using annual reports to a greater or lesser extent. Roughly 50 per cent of the respondents not engaged in company analysis study annual reports too. Concerning the purposes of studying annual reports, it appears that 73 per cent of the investment advisers study annual reports to underpin their advice, whereas about 75 per cent of the portfolio managers base their investment decisions to a greater or lesser extent on information supplied in annual reports. Directors/heads use annual reports especially as an orientation about companies.

The overall average time spending per annual report is almost 3 hours. If the functions of the respondents are taken into account it appears that the average time spending by investment advisers is more than 5 hours. The portfolio managers and directors/heads on the other hand spend about 1 and 1.5 hours respectively. The average number of annual reports studied is about 45. The differences between the different categories of investment analysts are not statistically significant. About three out of four respondents do not confine themselves to the annual reports of Dutch companies, but study annual reports of foreign companies, too. Generally, the respondents are not specialized in analysing companies in only one or a few branches of industry.

The respondents rate the most recent annual report as their most important source of information. Communications with management and interim reports are ranked second and third respectively. Reports of other investment analysts, industry statistics and annual reports of former years have the lowest ratings but are still considered to be (very) important by many respondents. It appears that the importance given to the most recent annual

report is significantly higher statistically than any of the other information sources. The most prominent difference between the categories of investment analysts is the perceived importance of the reports of other investment analysts. This information source is ranked third by the portfolio managers, whereas the other categories rank the reports of colleagues ninth or tenth.

With respect to the different parts of the annual report the consolidated income statement is clearly considered to be the most important part, followed by the consolidated balance sheet and the footnotes. The auditor's report and the report of the supervisory board have the lowest ratings. The differences between the mean ratings of the three most important parts and that of any of the other parts of the annual report are statistically significant. Taking into account the functions of the respondents, it appears that the report of the management board is considered to be more important by the directors/heads than by the other categories.

The valuation principles, changes of the valuation principles and the impact of these changes on the presented figures are perceived to be the most important information items in the footnotes. However, the information about accounting changes supplied in the annual reports of Dutch companies is qualified as moderate or bad by 43 per cent of the respondents.

It appears that much important information, like the management's expectations for the future, is not provided in the annual report. Nevertheless, about 68 per cent of the respondents perceive the annual report as a suitable medium to provide prospective financial information.

According to about 85 per cent of the respondents it is (very) important that the financial information presented by different companies should be comparable. About as many would like the existing companies' freedom in the Netherlands to choose their accounting methods to be limited.

With respect to the use of the different methods of analysis and the perceived importance of (the different parts of) the annual report, the findings of this study are to a large extent consistent with the results of similar studies from abroad.

Bibliography

- * Arnold J. & Moizer P., *A Survey of the Methods Used by UK Investment Analysts to Appraise Investments in Ordinary Shares*, Accounting and Business Research, Summer 1984.
- * Arnold J., Moizer P. & Noreen E., *Investment Appraisal Methods of Financial Analysts: A Comparative Study of U.S. and U.K. Practices*, The International Journal of Accounting, No. 2, 1984.
- * Chang L.S. & Most K.S., *Investor Uses of Financial Statements: An Empirical Study*, in: Curtis J.K., *Corporate Annual Report Analysis*, University of New England, Armidale (Australia), 1978.
- * Chang L.S. & Most K.S., *The Perceived Usefulness of Financial Statements for Investors' Decisions*, Florida International University Press, Miami, 1985.
- * Chang L.S., Most K.S. and Brain C.W., *The Utility of Annual Reports: An International Study*, *Journal of International Business Studies*, Spring-Summer 1983.
- * Foster G., *Financial Statement Analysis*, second edition, Prentice Hall, Englewood Cliffs, 1986.
- * Klaassen J. & Schreuder H., *Het financiële jaarverslag van ondernemingen: een onderzoek onder gebruikers*, Stenfert Kroese, Leiden, 1980.
- * Klaassen J. & Schreuder H., *Corporate Report Readership and Usage in the Netherlands*, *Maandblad voor Accountancy en Bedrijfshuishoudkunde*, februari-maart 1981.
- * Lee T.A. & Tweedie D.P., *Accounting Information: An Investigation of Private Shareholder Understanding*, *Accounting and Business Research*, Winter 1975.
- * Lee T.A. & Tweedie D.P., *The Private Shareholder: his Sources of Financial Information and his Understanding of Reporting Practices*, *Accounting and Business Research*, Autumn 1976.
- * Lev B., *Financial Statement Analysis: A New Approach*, Prentice Hall, Englewood Cliffs, 1974.
- * Moizer P. & Arnold J., *Share Appraisal by Investment Analysts - Portfolio vs. Non-Portfolio Managers*, Accounting and Business Research, Autumn 1984.
- * Rees B., *Financial Analysis*, Prentice Hall, Englewood Cliffs, 1990.

Notes

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2. The pilot study produced 30 responses, 29 of them usable, resulting in a response rate of 51.8 per cent (29/56).
3. The questionnaire was revised; a few questions, concerning the analysis methods used by the investment analysts and investment analysts' opinion about a few accounting matters, were added.
4. Because 6 of the 506 questionnaires mailed were returned as undeliverable, the adjusted population consisted of 500 members, resulting in a response rate of 43.0 per cent (215/500).
5. The Mann-Whitney test is a nonparametric statistical test. This test is used here because of the skewness of the frequency distribution.
6. The Student-Newman-Keuls multiple range test requires the use of $k-1$ ranges for the comparison in pairs of k group means. The means are ranked from smallest to largest. Comparisons are made in a particular sequential manner. First the largest mean in the first row is compared with the smallest mean in that row. If the difference between the two means is significant the largest mean is compared with the second smallest mean, and so on until a nonsignificant difference is found. No further comparisons are made in the first row. This procedure is then carried out to the second row, third row, and so on. The range used to test for a significant difference between means depends on the number of steps between two means being tested. The probability of obtaining one or more spuriously significant results (type I errors) does not exceed α .