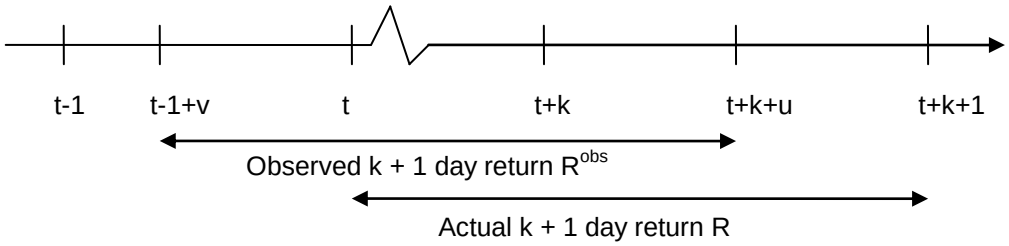

Figure 1. Observed versus actual return

Table 1. Trading/Non-trading Characteristics of the Norwegian Equity Market.

Summary statistics of trading and non-trading days in the three periods under examination are presented below as an average for every firm in the samples. Listed days are the total number of days in each period for which a firm was listed on the stock exchange. Non-trading days are the average number of listed days on which the market was open and volume was zero for individual stocks in the samples. Trading day are the average number of listed days where non-zero volume was registered for individual stocks. Trading days as a percentage of total listed days is presented in the last column. K0 is non-trading days in an open marlet and kC is nontrading days in a closed market.

PANEL A.	1983-1994	No. of	Listed	No. of Non-trading	No. of Trading	Percentage
Statistics:		firms	Days:	Days:	Days:	of trading days:
	k_O=1	220	1565	623	942	60,386 %
Means	k_O=2	161	1730	781	949	54,894 %
in the	k_O=3	107	1902	973	929	47,989 %
samples	k_C=2	224	1547	575	973	65,258 %
	k_C=1	173	1728	542	1186	71,351 %
	k_O=1		51	12	33	5,474 %
Minimums	k_O=2		158	66	73	5,983 %
in the	k_O=3		501	206	73	5,474 %
samples	k_C=2		45	0	42	5,983 %
	k_C=1		272	3	236	21,037 %
PANEL B.	1983-1987					
	k_O=1	133	919	348	571	63,495 %
Means	k_O=2	94	967	443	525	55,056 %
in the	k_O=3	72	998	543	455	45,744 %
samples	k_C=2	134	900	308	592	67,941 %
	k_C=1	89	964	204	760	79,466 %
	k_O=1		64	11	23	6,685 %
Minimums	k_O=2		306	61	113	10,348 %
in the	k_O=3		216	155	43	3,938 %
samples	k_C=2		37	0	35	10,348 %
	k_C=1		286	3	261	35,531 %
PANEL C.	1987-1994					
	k_O=1	178	1060	432	628	58,998 %
Means	k_O=2	122	1177	533	643	55,230 %
in the	k_O=3	89	1252	631	621	49,484 %
samples	k_C=2	195	1055	369	686	66,341 %
	k_C=1	138	1182	311	871	75,016 %
	k_O=1		51	9	33	6,361 %
Minimums	k_O=2		158	66	87	9,179 %
in the	k_O=3		431	127	121	8,339 %
samples	k_C=2		45	0	42	9,139 %
	k_C=1		272	0	236	23,465 %

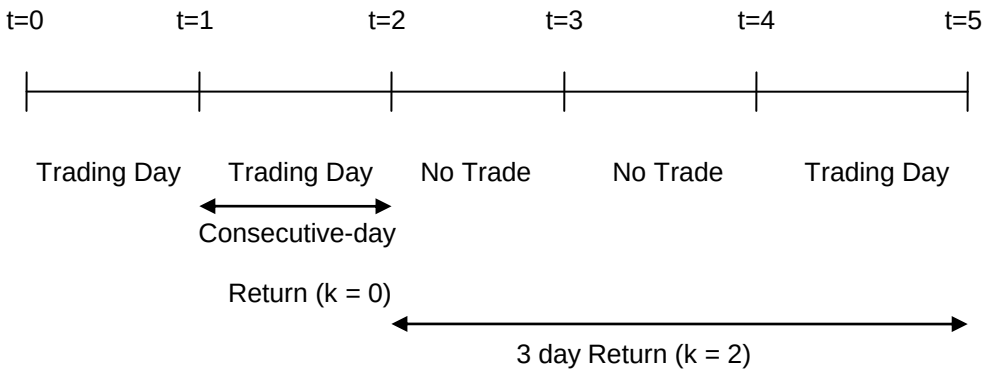

Figure 2. Trading and Non-trading Mean Return Calculations

Table 2. Sample Mean Ratios.

Returns over k+1 days are measured between the last transaction on a pair of trading days and include k nontrading days. The third column shows the number of firms in a given period that has at least 5 observations for a particular k. In each sample period, the mean returns are calculated at the firm level for both consecutive daily returns (k=0) and for non-trading periods k_O=1,2,3 in an open market and k_C=1 (holidays),2 (Mondays) in a closed market. These are then aggregated to find mean returns for consecutive days of trading and for non-trading periods.

Period:	Number of Non-trading Days:	Number of firms:	Consecutive-day Mean Return:	Mean Return:
	k_O=1	220	0,29075	-0,15546
June 1, 1983 -	k_O=2	161	0,29928	-0,50129
	k_O=3	107	0,31727	-0,64096
February 1994.	k_C=2	224	0,25280	0,08760
	k_C=1	173	0,17204	0,65244
	k_O=1	133	0,30190	0,08846
June 1, 1983 -	k_O=2	94	0,30755	0,07781
	k_O=3	72	0,37591	-0,17648
October 1, 1987.	k_C=2	134	0,21120	0,38462
	k_C=1	89	0,08411	0,42821
	k_O=1	178	0,31983	-0,11076
December 1, 1987-	k_O=2	122	0,33456	-0,71609
	k_O=3	89	0,39929	-0,65447
February 1, 1994.	k_C=2	195	0,29717	-0,02975
	k_C=1	138	0,22904	0,76729

Table 3. Sample Variance Ratios.

Returns over k+1 days are measured between the last transaction on a pair of trading days and include k_O non-trading days in an open market and k_C non-trading days in a closed market. The third column shows the number of firms in a given period that has at least 5 observations for a particular k. In each sample period, the variances are calculated at the firm level for both consecutive daily returns (k=0) and for non-trading periods k_O=1,2,3 in an open market and k_C=1 (holidays),2 (Mondays) in a closed market. These are then aggregated to find mean variances for consecutive days of trading and for non-trading periods. Dividing the non-trading period variance by the consecutive day variance results in the mean variance ratio.

Period:	Number of Non-trading Days:	Number of firms:	Consecutive-day Variance	Mean Variance	Mean Variance Ratio	
	k_O=1	220	16.38386	28.32208	1.72866	*
June 1, 1983 -	k_O=2	161	16.68857	40.64638	2.43558	*
	k_O=3	107	16.86658	52.24464	3.09752	*
February 1994.	k_C=2	224	16.12490	16.21322	1.00548	!
	k_C=1	173	14.48913	14.05301	0.96990	!
	k_O=1	133	11.96558	18.29056	1.52860	*
June 1, 1983 -	k_O=2	94	12.89583	26.23702	2.03454	*
	k_O=3	72	13.94937	42.77034	3.06611	*
October 1, 1987.	k_C=2	134	11.12718	10.15426	0.91256	!
	k_C=1	89	9.58677	9.09407	0.94861	!
	k_O=1	178	19.89165	32.74358	1.64610	*
December 1, 1987 -	k_O=2	122	18.94707	47.53809	2.50899	*
	k_O=3	89	20.47715	60.08368	2.93418	*
February 1, 1994.	k_C=2	195	19.08789	18.99361	0.99506	!
	k_C=1	138	15.65205	15.76022	1.00691	!

* Statistical significant at 5% for the first variance ratio hypothesis.
! Statistical significant at 5% for the second variance ratio hypothesis.

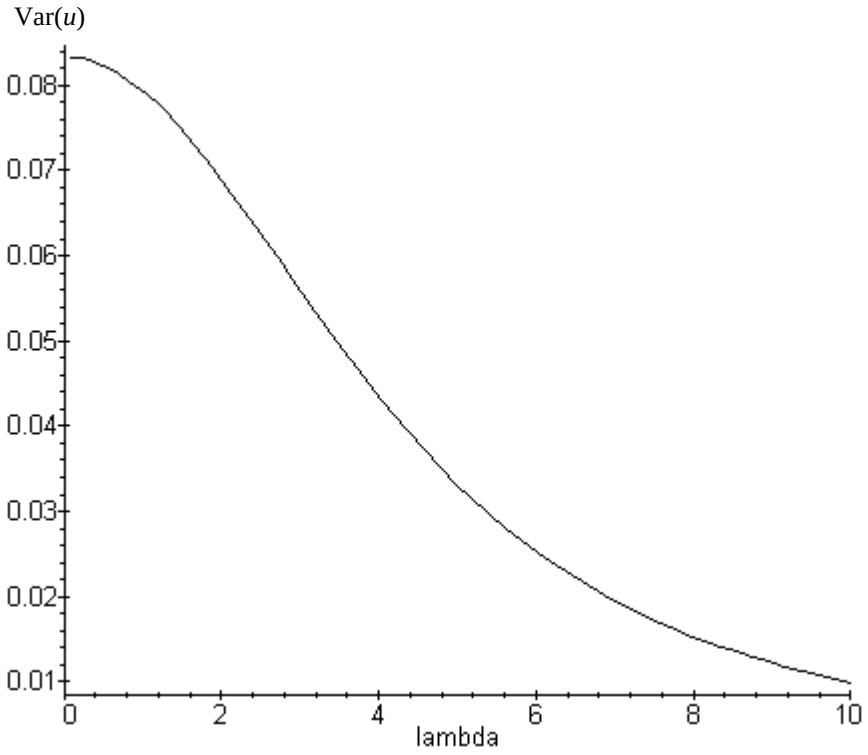

Figure 3. The variance of *u* with increasing λ (lambda)

Table 4. Variance Ratios; Adjusted for non-synchronous trading.

See Table 3 for notations and descriptions.

Period:	Number of Nontrading Days:	Number of firms:	Consecutive-day Variance:	Mean Variance:	Mean Variance Ratio:	
	k_O=1	220	16,68125	29,76141	1,78412	*
June 1, 1983 -	k_O=2	161	16,92920	14,44167	0,85306	*
	k_O=3	107	16,83933	51,61380	3,06507	*
February 1994.	k_C=2	224	16,35508	16,62128	1,01628	!
	k_C=1	173	14,57460	15,40069	1,05668	!
	k_O=1	133	12,37486	19,08094	1,54191	*
June 1, 1983 -	k_O=2	94	13,17380	27,78494	2,10911	*
	k_O=3	72	13,88933	42,29558	3,04519	*
October 1, 1987.	k_C=2	134	11,31923	10,57626	0,93436	!
	k_C=1	89	9,64357	10,14516	1,05201	!
	k_O=1	178	20,30993	35,31991	1,73905	*
December 1, 1987 -	k_O=2	122	19,23652	51,48728	2,67654	*
	k_O=3	89	20,43383	14,86621	0,72753	*
February 1, 1994.	k_C=2	195	19,36226	19,51265	1,00777	!
	k_C=1	138	15,75367	17,36667	1,10239	!

* Statistical significant at 5% for the first adjusted variance ratio hypothesis.
! Statistical significant at 5% for the second adjusted variance ratio hypothesis.