

# Empirics of the Oslo Stock Exchange: Ownership results

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\*University of Stavanger and Norges Bank. The views expressed are those of the author and should not be interpreted as reflecting those of Norges Bank.

# 1 Introduction

The purpose of this document is to give various empirical descriptions of the ownership at the Oslo Stock Exchange, using data from VPS and Oslo Børs. Many of the results here are updates to those in Bøhren and Ødegaard (2000) and Bøhren and Ødegaard (2001), which should be consulted for data definitions.

## 2 Ownership at the Oslo Stock Exchange

**Table 1** Ownership variables

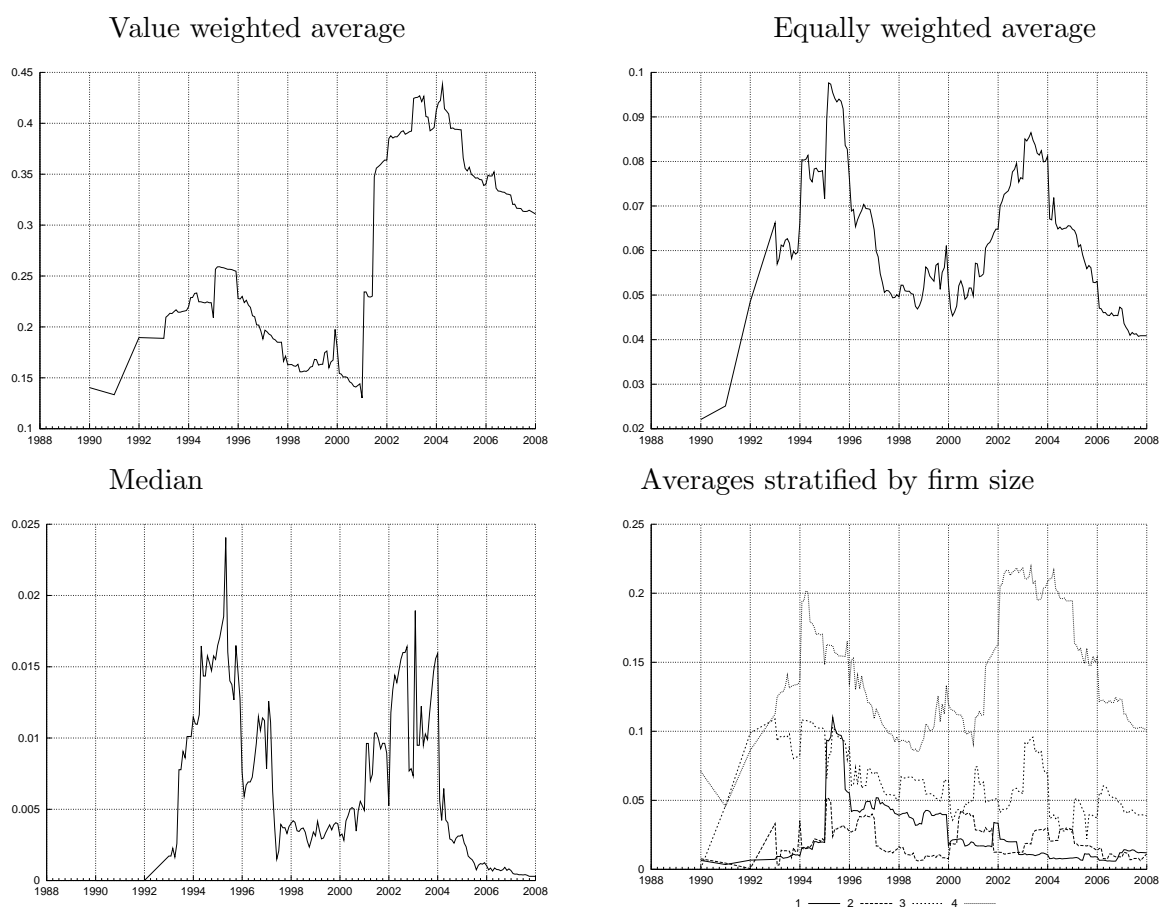
	1989–2007			1989–1994			1995–1999			2000–2007		
	vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
Inside Fraction	2.7	5.7	0.0	4.8	10.3	1.4	2.4	5.0	0.1	1.0	2.9	0.0
Primary Insider Fraction	0.8	1.9	0.0	0.6	1.6	0.0	1.1	2.4	0.0	0.8	2.5	0.0
Herfindahl Index	0.22	0.15	0.08	0.15	0.14	0.08	0.15	0.15	0.08	0.29	0.16	0.09
Largest owner	37.2	27.6	21.0	28.4	26.2	20.8	29.4	27.0	21.0	44.8	28.3	21.1
Three largest	50.9	44.1	41.9	45.1	43.4	38.5	44.8	43.4	41.8	56.6	44.7	43.1
Five largest	57.5	52.1	51.4	53.1	52.6	49.4	52.3	51.5	51.5	62.2	52.3	52.6
Total no owners	22396	4161	1198	18032	5439	1388	15819	3595	1151	27894	4142	1498
Total no owners(>100 shares)	13956	2327	860	7861	1853	654	7511	1847	814	19884	2775	965
Largest owner: state	45.5	10.5	0.0	37.5	9.7	0.0	38.4	10.5	0.0	52.2	10.7	0.0
Largest owner: foreign	16.7	20.5	0.0	8.1	14.0	0.0	22.8	19.8	0.0	15.3	22.8	0.0
Largest owner: financial	5.9	12.5	0.0	15.0	14.9	0.0	5.1	11.5	0.0	3.7	12.3	0.0
Largest owner: nonfinancial	21.9	42.6	0.0	31.1	46.9	0.0	25.1	40.7	0.0	17.2	42.6	0.0
Largest owner: individual	3.0	8.0	0.0	7.1	8.2	0.0	3.9	12.6	0.0	1.2	5.2	0.0
Fraction State Owners	26.9	6.2	0.5	21.2	6.5	1.0	19.6	6.3	0.4	33.3	6.0	0.4
Fraction Foreign Owners	31.7	22.8	12.7	29.3	20.5	13.3	33.4	22.5	13.7	31.2	23.6	11.2
Fraction Financial Owners	16.8	18.7	16.6	18.5	20.6	18.1	20.5	21.0	19.4	13.9	16.7	14.3
Fraction Nonfinancial Owners	19.1	35.0	28.9	25.6	41.0	40.8	20.9	33.6	28.8	16.0	34.1	27.6
Fraction Individual Owners	7.5	19.7	13.3	10.9	18.3	12.4	8.8	20.0	13.0	5.7	19.9	13.7
Fraction Mutual Fund Owners	5.5	6.8	4.9	4.5	5.8	5.2	6.6	7.2	6.1	5.0	6.8	4.4
Prod.Market: 10 Energy	22.2	14.7	0.0	18.0	17.0	0.0	19.6	13.5	0.0	37.3	17.7	0.0
Prod.Market: 15 Material	6.3	6.6	0.0	8.2	6.8	0.0	4.4	4.1	0.0	3.1	2.4	0.0
Prod.Market: 20 Industry	29.9	26.4	0.0	38.4	29.8	0.0	31.4	30.7	0.0	13.5	21.5	0.0
Prod.Market: 25 ConsSisc	5.8	9.9	0.0	4.5	9.5	0.0	8.9	11.6	0.0	7.7	9.3	0.0
Prod.Market: 30 ConsStapl	6.4	5.1	0.0	8.9	4.2	0.0	6.3	2.4	0.0	5.7	4.4	0.0
Prod.Market: 35 Health	5.3	2.9	0.0	8.4	2.0	0.0	6.8	2.3	0.0	5.0	4.6	0.0
Prod.Market: 40 Finan	15.5	24.2	0.0	12.0	24.3	0.0	15.9	21.8	0.0	12.5	24.6	0.0
Prod.Market: 45 IT	5.2	9.3	0.0	1.7	6.4	0.0	3.9	12.6	0.0	5.8	13.5	0.0
Prod.Market: 50 Telecom	2.8	0.5	0.0	0.0	0.0	0.0	1.2	0.6	0.0	8.5	0.9	0.0
Prod.Market: 55 Util	0.6	0.4	0.0	0.0	0.0	0.0	1.6	0.5	0.0	0.9	1.1	0.0

The table shows various descriptive measures: Average, equally weighted (ew) and value weighed (vw), median (med) for the whole period and for subperiods. *Herfindahl index* : Measure of ownership concentration, sum of squared ownership fractions, Largest Owner: Fraction of the company owned by its largest owners, Three largest owners: Fraction of the company owned by its three largest owners, Five largest owners: Fraction of the company owned by its five largest owners, Number of owners: Total number of owners in company, *Number of owners ( $\geq 100$ )* : Total number of owners in company, only counting owners with a minimum of 100 shares, *Insider fraction* : Fraction of company owned by insiders og *Primary Insider fraction* : Fraction of company owned by primary insiders (executives, members of board). Owners are grouped into five mutuale exclusive owners: Public, Foreign, Financial, Nonfinancial and Individual owners. Mutual funds is a subgroup of financials. Variables: *Largest owner: <type>* indicator variable equal to one if the largest owner is of the indicated type. *Fraction <type>* measures fraction of the company owned by the given type. Variables marked *Produktmarket: <marked>* are indicator variables for the product market the company operates in.

## 2.1 Owner types

**Figure 1** Public ownership fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		26.9	6.2	0.5	22.7	6.5	1.0	19.6	6.3	0.4	33.3	6.0	0.4
Industry	Energy	26.9	4.7	0.4	10.0	3.1	0.7	7.1	2.9	0.6	44.6	6.3	0.2
	Material	10.2	9.7	4.9	15.3	11.9	5.6	14.4	17.1	5.2	5.9	4.4	4.1
	Industry	28.0	6.8	0.2	34.7	5.8	0.3	31.5	5.6	0.1	23.8	7.9	0.5
	ConsDisc	6.1	4.3	0.4	6.3	5.3	0.5	6.7	4.4	0.1	5.7	4.0	0.5
	ConsStapl	10.2	7.0	2.3	10.6	7.6	7.9	9.9	7.2	2.3	10.3	6.7	1.4
	Health	11.9	13.3	0.3	11.1	40.9	44.5	9.0	13.5	1.1	13.9	4.9	0.1
	Finan	14.0	5.2	1.1	17.6	6.8	0.7	26.4	8.5	1.5	5.0	2.6	1.1
	IT	7.8	5.3	0.2	3.1	3.3	0.8	4.3	3.9	0.3	11.5	6.8	0.2
	Telecom	41.3	38.6	28.6				2.3	6.7	1.3	59.5	53.9	58.5
Util	35.9	29.8	29.3				31.8	31.8	32.9	37.9	28.8	28.2	
Size	1 (small)	2.2	2.6	0.0	1.1	1.2	0.0	4.2	5.1	0.1	1.3	1.3	0.0
	2	2.0	1.9	0.0	1.6	1.5	0.0	2.2	2.1	0.1	2.0	2.0	0.0
	3	6.7	6.3	1.9	8.6	9.3	3.3	7.1	6.7	0.6	5.9	5.1	0.8
	4 (large)	30.3	14.2	5.1	24.3	14.5	5.2	22.6	11.8	4.6	37.0	15.7	6.4



We describe *Public ownership fraction* : Fraction of company owned by public institutions (state, municipalities, public pension funds, etc). The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 2** Largest owner is public

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		45.5	10.5	0.0	45.6	9.7	0.0	38.4	10.5	0.0	52.2	10.7	0.0
Industry	Energy	38.9	5.6	0.0	23.0	3.5	0.0	6.6	2.0	0.0	63.7	8.4	0.0
	Material	21.5	17.5	0.0	43.2	31.0	0.0	27.2	29.6	0.0	11.7	6.0	0.0
	Industry	51.3	10.2	0.0	63.6	7.7	0.0	57.7	9.2	0.0	43.6	11.5	0.0
	ConsDisc	6.9	8.6	0.0	10.2	7.7	0.0	8.0	9.2	0.0	5.3	8.5	0.0
	ConsStapl	46.3	15.4	0.0	14.0	8.0	0.0	53.8	17.8	0.0	51.1	16.0	0.0
	Health	48.3	26.6	0.0	7.6	46.4	50.0	45.4	22.1	0.0	61.9	23.6	0.0
	Finan	23.5	7.1	0.0	22.4	10.7	0.0	47.7	13.8	0.0	8.8	1.9	0.0
	IT	20.0	12.7	0.0	10.6	7.1	0.0	10.3	6.8	0.0	28.8	18.0	0.0
	Telecom	59.1	53.1	50.0				1.9	11.5	0.0	85.4	74.0	100.0
Util	79.5	65.3	50.0				60.4	60.4	100.0	89.0	67.7	50.0	
Size	1 (small)	2.3	2.0	0.0	0.0	0.0	0.0	5.2	5.2	0.0	1.2	0.6	0.0
	2	3.4	3.3	0.0	3.1	3.3	0.0	3.5	3.3	0.0	3.4	3.3	0.0
	3	13.0	12.0	0.0	15.4	15.4	0.0	13.5	13.4	0.0	12.1	10.2	0.0
	4 (large)	51.1	26.0	0.0	43.1	21.7	0.0	44.2	22.0	0.0	57.7	29.7	0.0

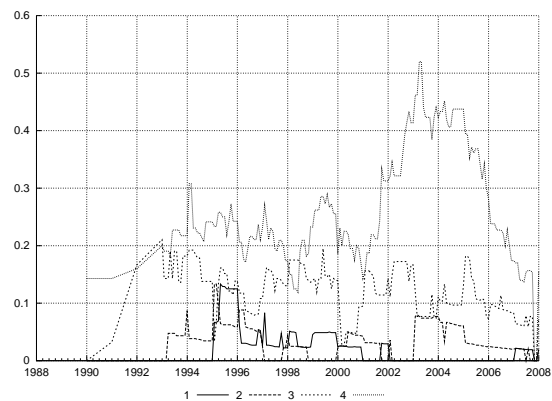
Value weighted average



Equally weighted average



Averages stratified by firm size



We describe *Largest owner is public* : Indicator variable equal to one if the largest owner is public. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 3** Financial ownership fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		16.8	18.7	16.6	16.3	20.6	18.1	20.5	21.0	19.4	13.9	16.7	14.3
Industry	Energy	14.9	17.6	16.1	18.6	16.9	16.2	21.6	20.8	21.9	9.5	15.7	12.9
	Material	19.6	18.0	17.1	24.6	22.2	21.5	25.7	22.2	23.4	14.3	14.1	12.9
	Industry	14.0	16.0	14.3	11.0	16.1	14.3	15.1	19.7	15.9	14.2	13.6	11.2
	ConsDisc	15.1	16.3	13.3	12.8	18.0	15.0	17.0	18.2	16.3	14.6	14.6	11.8
	ConsStapl	24.3	25.6	25.7	33.9	32.6	36.0	29.6	32.1	31.2	18.1	19.4	17.0
	Health	23.6	18.6	16.4	21.1	17.2	17.4	25.5	19.3	18.5	23.2	18.6	14.9
	Finan	28.6	21.2	17.3	28.0	27.8	24.0	23.7	22.3	20.8	31.9	18.4	15.4
	IT	20.4	22.4	21.0	20.5	25.8	25.8	23.3	22.1	21.7	18.4	21.6	20.1
	Telecom	8.2	8.6	6.3				12.4	12.5	13.9	6.3	6.8	5.6
Util	10.3	12.3	13.6				16.8	16.8	17.2	6.9	9.9	11.8	
Size	1 (small)	17.1	17.1	14.4	21.0	20.4	20.1	17.6	16.9	13.7	15.7	16.2	14.4
	2	18.3	18.1	15.5	19.2	19.3	14.3	20.5	20.0	17.9	16.5	16.5	14.5
	3	20.9	20.8	18.3	21.3	21.8	18.8	24.9	24.8	23.6	18.2	17.9	15.1
	4 (large)	16.3	19.1	18.8	17.9	20.9	19.0	20.0	22.4	21.9	13.4	16.4	15.8

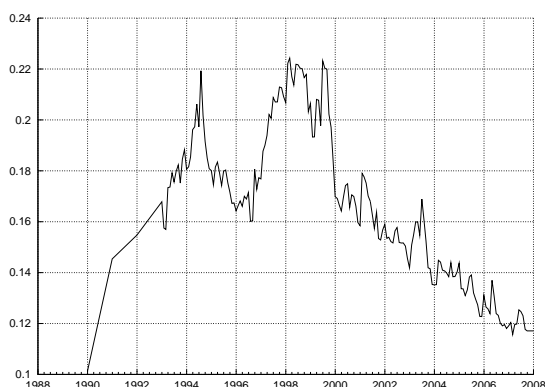
Value weighted average



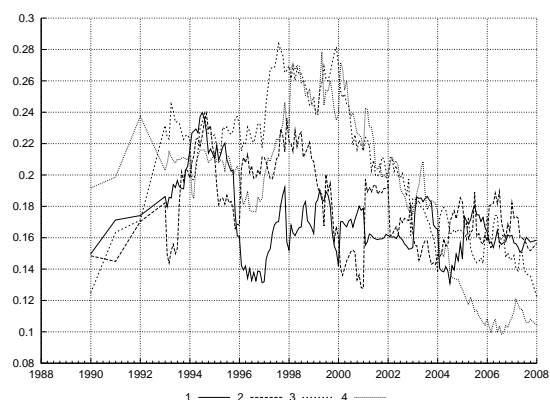
Equally weighted average



Median



Averages stratified by firm size



We describe *Financial ownership fraction* : Fraction of company owned by financials (banks, mutual funds, insurance, etc). The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 4** Largest owner is financial

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		5.9	12.5	0.0	5.0	14.9	0.0	5.1	11.5	0.0	3.7	12.3	0.0
Industry	Energy	2.1	2.6	0.0	0.5	1.3	0.0	4.8	3.5	0.0	0.9	2.4	0.0
	Material	0.7	3.9	0.0	3.1	11.4	0.0	0.6	6.3	0.0	0.0	0.2	0.0
	Industry	1.0	3.8	0.0	1.3	7.7	0.0	1.8	6.0	0.0	0.3	1.2	0.0
	ConsDisc	2.2	8.9	0.0	7.2	10.5	0.0	1.0	3.8	0.0	1.5	11.7	0.0
	ConsStapl	9.6	13.3	0.0	62.0	27.0	0.0	0.1	8.0	0.0	0.2	12.6	0.0
	Health	7.1	4.7	0.0	42.6	23.2	0.0	0.4	0.3	0.0	1.0	2.0	0.0
	Finan	22.7	33.5	0.0	30.5	36.9	0.0	18.2	31.1	0.0	23.2	34.1	0.0
	IT	5.9	10.1	0.0	4.9	8.1	0.0	8.8	11.3	0.0	4.4	10.0	0.0
	Telecom	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Util	1.8	5.9	0.0				0.0	0.0	0.0	2.8	8.9	0.0	
Size	1 (small)	20.5	24.7	0.0	21.7	24.5	0.0	17.6	17.6	0.0	22.0	29.3	0.0
	2	10.6	11.1	0.0	10.9	12.2	0.0	10.2	11.5	0.0	10.7	10.5	0.0
	3	10.0	10.1	0.0	10.3	10.5	0.0	14.6	14.5	0.0	7.1	7.3	0.0
	4 (large)	5.0	4.8	0.0	15.6	13.9	0.0	3.4	3.4	0.0	3.0	3.0	0.0

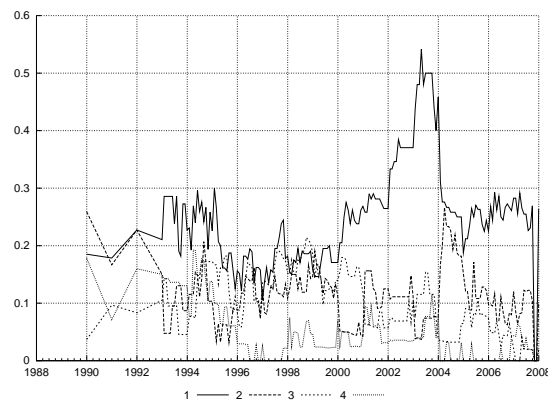
Value weighted average



Equally weighted average



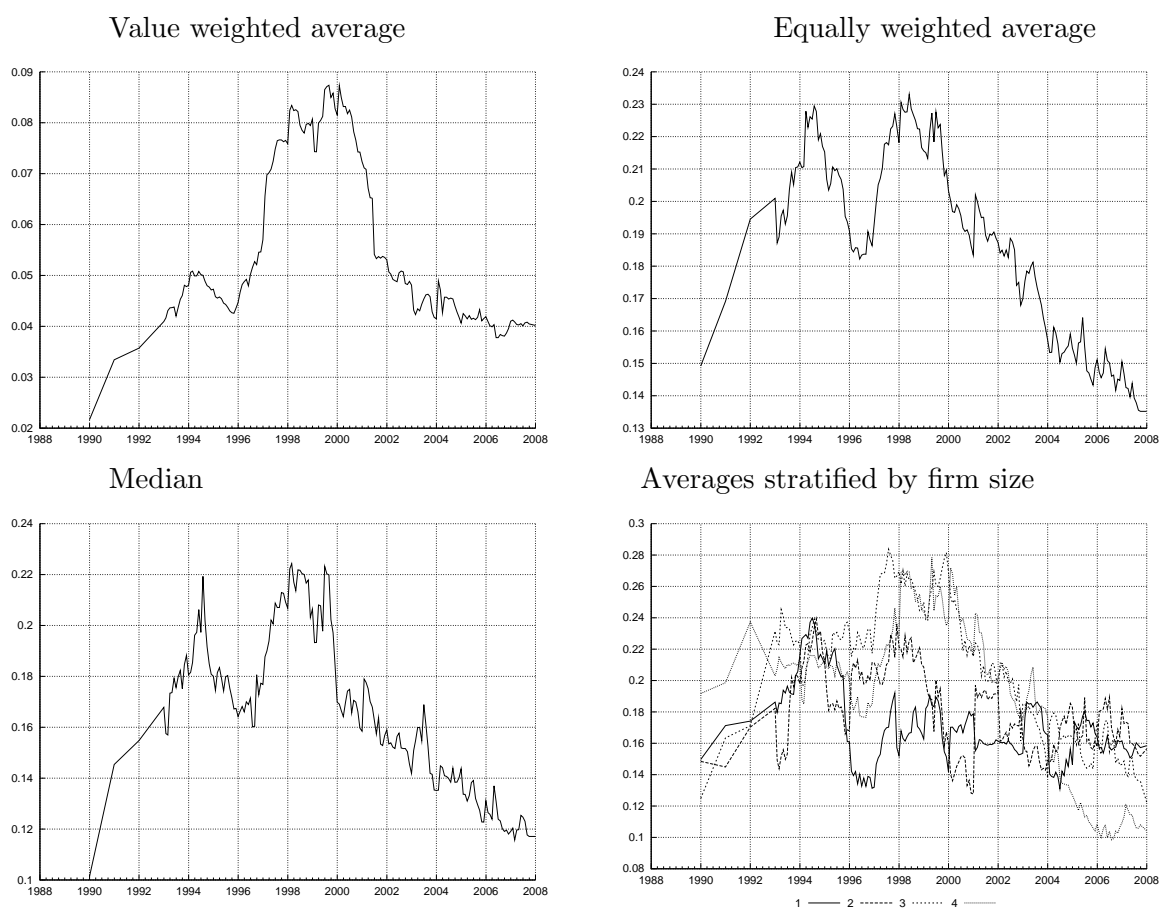
Averages stratified by firm size



We describe *Largest owner is financial* : Indicator variable equal to one if the largest owner is financial. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 5** Mutual fund ownership fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		5.5	6.8	4.9	5.4	5.8	5.2	6.6	7.2	6.1	5.0	6.8	4.4
Industry	Energy	5.7	8.3	8.0	5.3	4.6	3.8	7.8	8.8	9.1	4.5	9.2	8.5
	Material	8.0	7.0	5.8	7.4	6.8	7.1	10.4	9.4	9.9	6.6	5.6	4.2
	Industry	6.5	6.9	5.6	3.2	4.8	4.2	5.4	7.4	5.8	8.1	7.2	6.1
	ConsDisc	6.8	6.5	4.0	3.8	6.1	3.7	7.1	7.8	6.2	7.6	5.8	3.3
	ConsStapl	6.7	7.3	6.4	6.0	6.6	6.5	8.3	9.0	9.1	6.0	6.4	4.8
	Health	10.1	7.8	7.0	4.3	3.6	3.6	9.1	7.4	6.0	12.6	9.4	8.0
	Finan	4.1	3.8	1.4	5.9	6.6	5.6	4.6	4.0	1.2	3.3	2.9	1.0
	IT	9.2	10.6	9.1	5.6	9.4	6.9	10.0	9.2	8.5	9.7	11.9	9.7
	Telecom	3.2	3.8	2.5				4.4	5.2	4.7	2.6	3.1	2.4
Util	3.3	3.2	4.0				4.4	4.4	4.3	2.8	2.5	1.4	
Size	1 (small)	5.4	4.5	1.8	7.2	6.5	6.9	6.4	5.2	2.1	4.1	3.4	0.8
	2	7.7	7.7	5.6	5.5	5.7	3.4	8.3	8.1	7.0	7.9	8.0	4.6
	3	8.3	8.2	7.4	5.9	5.9	5.3	8.5	8.4	7.6	8.9	8.7	8.0
	4 (large)	5.1	7.0	6.0	4.2	5.1	4.7	6.3	7.6	8.0	4.6	7.3	6.4

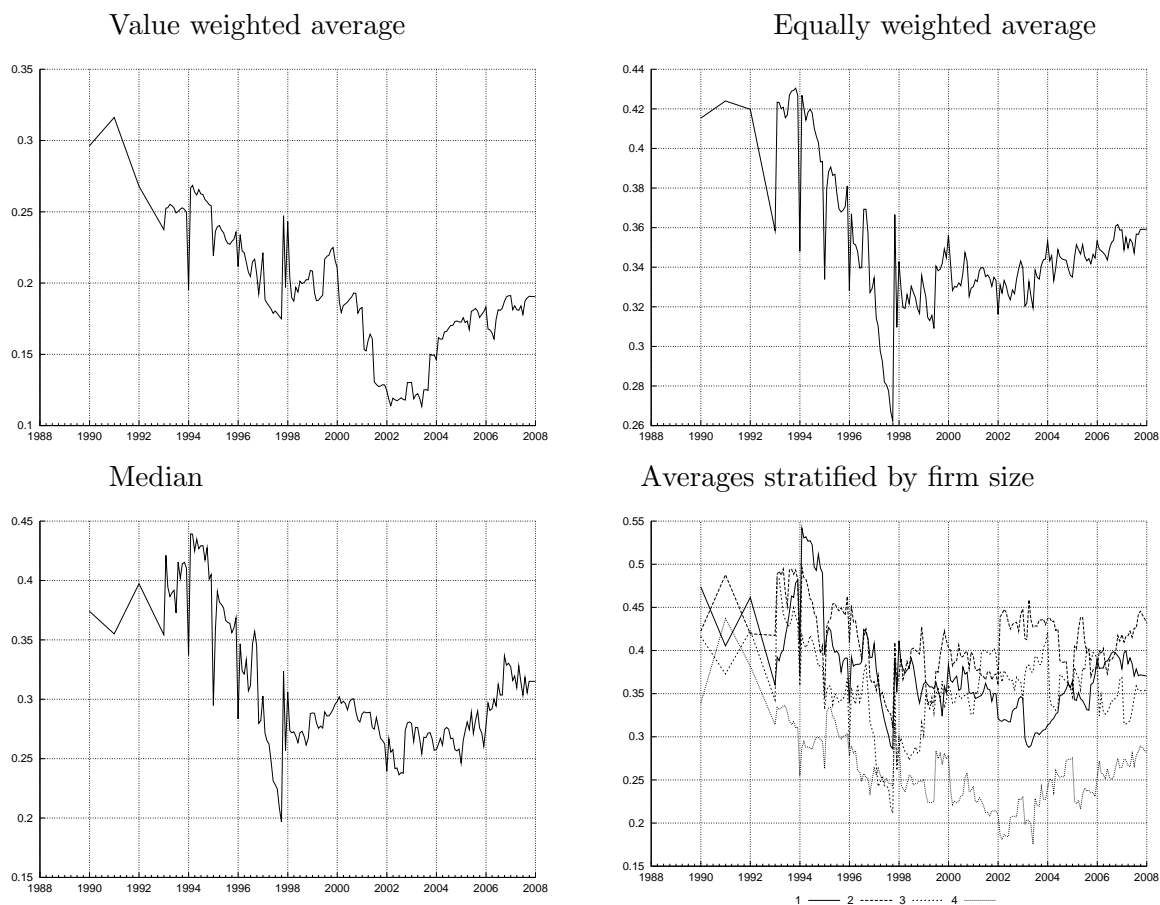


We describe *Mutual fund ownership fraction* : Fraction of company owed by mutual funds. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.



**Figure 6** Nonfinancial corporate ownership fraction

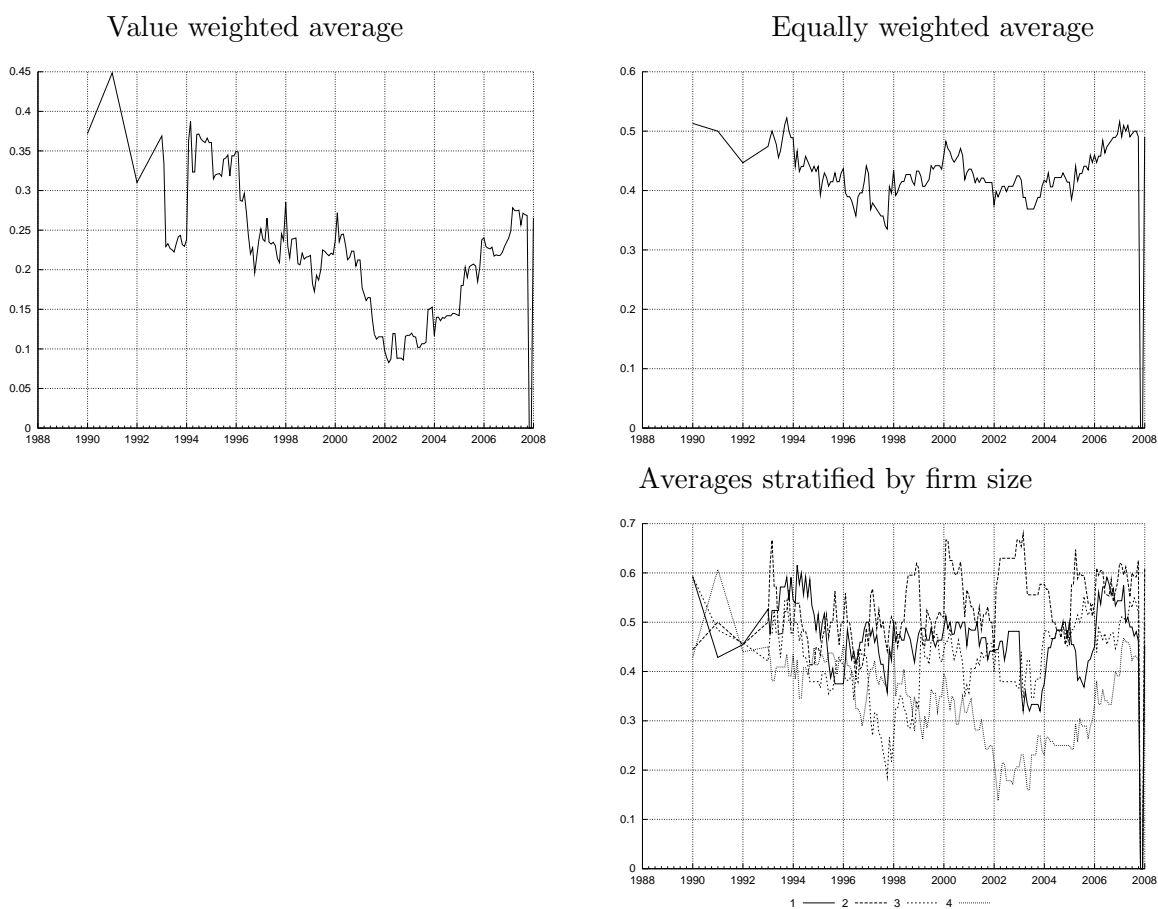
		1989–2007			1989–1994			1995–1999			2000–2007		
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		19.1	35.0	28.9	23.0	41.0	40.8	20.9	33.6	28.8	16.0	34.1	27.6
Industry	Energy	19.9	37.7	35.6	32.8	45.6	53.6	27.8	37.9	35.2	11.0	35.2	34.3
	Material	33.7	35.9	34.5	36.1	40.4	43.4	34.0	32.5	34.7	32.8	36.7	34.1
	Industry	17.1	41.9	43.3	16.1	44.1	44.0	14.4	39.3	39.5	19.0	43.0	49.7
	ConsDisc	41.0	42.9	42.6	32.7	43.1	42.1	30.6	36.7	35.8	50.1	46.8	48.1
	ConsStapl	24.6	39.4	39.9	33.0	44.2	46.7	21.2	34.1	32.6	24.3	41.4	40.6
	Health	20.8	25.2	16.8	25.8	17.4	16.3	14.9	16.8	12.3	23.0	32.8	28.0
	Finan	23.9	28.3	24.6	35.1	36.8	37.8	21.7	28.6	26.3	22.0	25.6	20.9
	IT	19.7	26.4	22.4	22.6	33.2	31.2	17.2	25.0	22.7	20.5	25.1	21.6
	Telecom	14.1	18.0	23.0				35.8	34.0	37.0	4.0	10.4	1.7
Util	34.2	36.8	31.0				22.1	22.1	27.1	40.4	44.3	48.8	
Size	1 (small)	41.2	37.4	31.6	48.3	46.2	45.0	39.5	37.2	33.0	40.2	35.0	26.9
	2	40.4	41.0	39.0	44.2	45.5	44.6	38.9	39.4	36.0	40.2	40.7	39.2
	3	35.2	35.5	30.1	44.0	41.4	36.6	31.2	31.5	28.8	35.1	36.3	29.3
	4 (large)	16.2	25.9	18.5	21.8	31.3	28.5	18.1	26.7	21.8	13.3	23.7	13.4



We describe *Nonfinancial corporate ownership fraction* :Fraction of company owed by nonfinancials (industrials). The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 7** Largest owner is nonfinancial

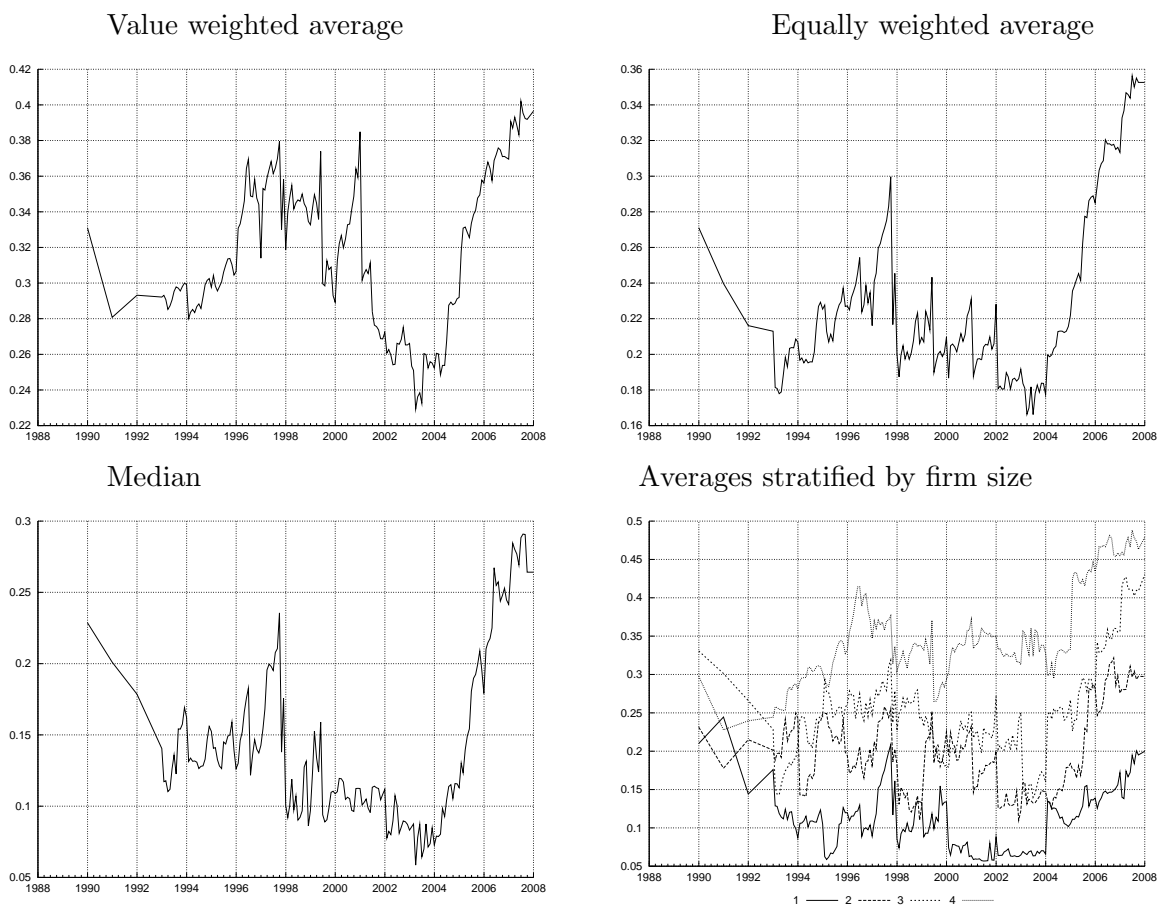
		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		21.9	42.6	0.0	28.2	46.9	0.0	25.1	40.7	0.0	17.2	42.6	0.0
Industry	Energy	31.3	55.3	100.0	59.1	66.2	100.0	41.7	53.1	100.0	16.7	53.4	100.0
	Material	32.4	30.6	0.0	43.9	44.5	25.0	41.1	34.5	0.0	23.7	24.2	0.0
	Industry	21.3	55.3	100.0	16.1	53.9	100.0	17.5	50.4	50.0	25.1	58.7	100.0
	ConsDisc	50.6	53.6	100.0	50.6	54.2	50.0	43.2	50.1	50.0	55.3	55.6	100.0
	ConsStapl	29.4	52.3	50.0	22.3	54.3	100.0	23.3	48.3	0.0	35.4	54.2	75.0
	Health	24.3	34.4	0.0	49.5	26.8	50.0	20.4	24.2	0.0	19.4	43.0	0.0
	Finan	16.1	27.3	0.0	27.0	23.6	0.0	14.7	26.4	0.0	13.8	29.0	0.0
	IT	15.4	26.8	0.0	9.9	39.5	0.0	13.9	25.1	0.0	17.8	24.2	0.0
	Telecom	29.9	33.0	0.0				93.2	75.0	100.0	0.9	12.0	0.0
Util	9.7	19.8	0.0				16.7	16.7	0.0	6.1	21.4	0.0	
Size	1 (small)	50.3	46.5	0.0	55.4	54.4	100.0	46.3	45.0	0.0	51.2	45.2	0.0
	2	52.3	53.1	100.0	49.7	50.0	0.0	49.3	50.0	50.0	54.9	55.9	100.0
	3	41.8	42.0	0.0	49.5	46.4	0.0	36.5	36.4	0.0	43.0	44.2	0.0
	4 (large)	18.4	33.4	0.0	27.6	41.5	0.0	22.0	37.6	0.0	13.4	28.5	0.0



We describe *Largest owner is nonfinancial* : Indicator variable equal to one if the largest owner is nonfinancial. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 8** Foreign ownership fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		31.7	22.8	12.7	31.9	20.5	13.3	33.4	22.5	13.7	31.2	23.6	11.2
Industry	Energy	34.9	32.2	21.6	35.5	29.2	18.5	39.5	28.8	21.3	31.8	35.3	27.6
	Material	32.4	31.0	30.4	21.2	21.6	20.7	22.1	22.0	18.5	42.3	39.6	43.0
	Industry	35.9	24.1	12.4	33.4	24.2	18.0	34.5	24.6	15.6	37.6	23.8	8.1
	ConsDisc	23.9	18.3	10.0	17.0	12.8	7.6	29.2	20.6	15.5	22.6	18.5	7.8
	ConsStapl	32.4	18.4	10.4	18.6	13.5	9.0	32.1	18.4	11.1	36.7	19.8	10.3
	Health	33.3	27.2	21.1	37.6	22.3	20.9	42.8	34.9	23.3	26.1	23.7	20.3
	Finan	23.8	12.7	4.0	15.3	11.0	7.9	24.5	13.4	5.7	25.9	12.7	3.4
	IT	41.4	27.7	21.9	49.8	28.5	23.6	42.9	26.5	17.2	37.8	28.3	25.0
	Telecom	35.2	32.7	32.7				48.8	46.0	45.9	28.8	26.3	31.9
Util	14.2	13.9	8.4				23.1	23.1	19.9	9.7	9.2	3.0	
Size	1 (small)	12.4	11.0	3.6	12.4	12.4	7.8	12.3	11.4	3.9	12.4	10.3	3.1
	2	20.6	19.7	12.4	20.9	20.1	14.1	20.3	19.4	12.9	20.7	19.9	10.2
	3	25.2	25.0	14.2	20.4	21.4	13.3	25.4	25.4	15.5	26.4	25.9	12.8
	4 (large)	33.2	35.0	33.9	31.3	28.1	25.7	35.7	33.8	32.9	32.2	37.8	35.6



We describe *Foreign ownership fraction* : Fraction of company owed by foreign investors. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 9** Largest owner is foreign

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		16.7	20.5	0.0	16.3	14.0	0.0	22.8	19.8	0.0	15.3	22.8	0.0
Industry	Energy	23.9	25.9	0.0	15.1	17.6	0.0	40.9	26.5	0.0	15.9	28.0	0.0
	Material	43.6	45.2	0.0	8.4	12.3	0.0	31.1	29.6	0.0	61.6	64.6	100.0
	Industry	19.2	20.1	0.0	7.2	17.1	0.0	18.7	22.3	0.0	23.0	19.6	0.0
	ConsDisc	6.7	11.6	0.0	5.4	9.8	0.0	12.6	15.8	0.0	3.4	9.5	0.0
	ConsStapl	12.7	8.6	0.0	1.0	2.1	0.0	22.0	12.5	0.0	10.4	8.0	0.0
	Health	11.1	15.1	0.0	0.0	0.0	0.0	25.5	21.2	0.0	5.3	15.7	0.0
	Finan	16.3	17.3	0.0	8.3	8.9	0.0	15.1	14.1	0.0	19.4	21.8	0.0
	IT	40.3	26.6	0.0	55.8	26.2	0.0	39.5	20.0	0.0	36.3	30.8	0.0
	Telecom	9.5	10.4	0.0				4.9	7.3	0.0	11.7	12.0	0.0
Util	7.6	7.6	0.0				22.9	22.9	0.0	0.0	0.0	0.0	
Size	1 (small)	13.6	12.8	0.0	11.8	11.4	0.0	10.1	10.8	0.0	16.4	14.4	0.0
	2	20.6	19.8	0.0	15.4	15.6	0.0	20.9	19.9	0.0	21.9	21.0	0.0
	3	22.8	23.0	0.0	12.8	13.3	0.0	20.5	20.0	0.0	27.2	27.8	0.0
	4 (large)	16.1	27.6	0.0	7.1	15.9	0.0	23.5	31.0	0.0	14.2	28.8	0.0

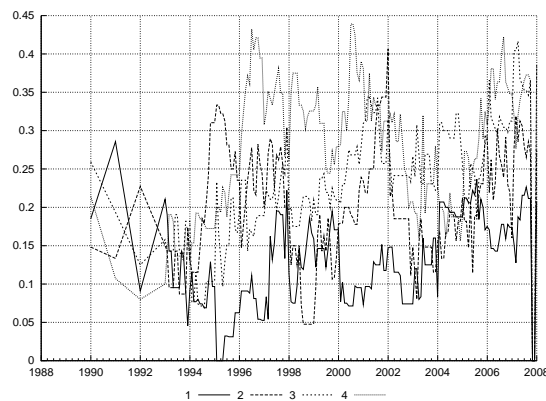
Value weighted average



Equally weighted average



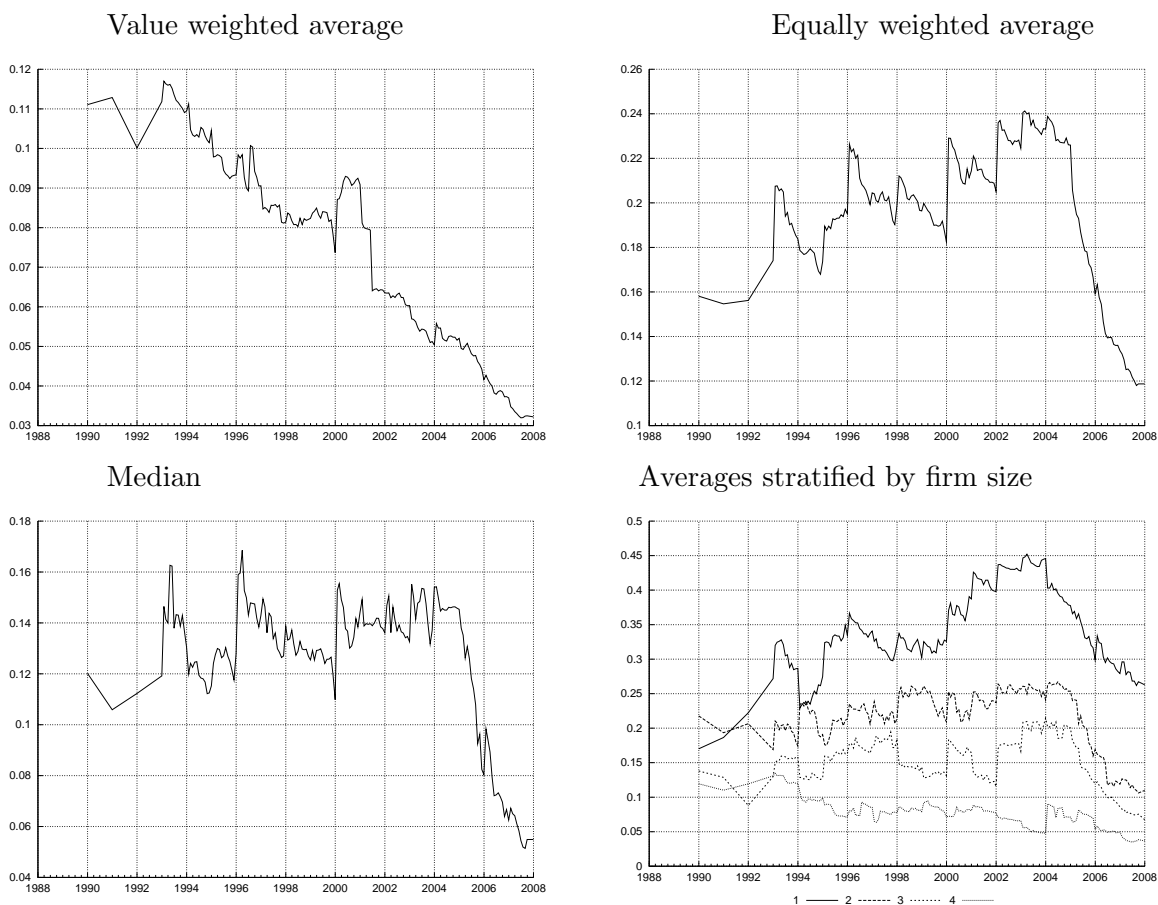
Averages stratified by firm size



We describe *Largest owner is foreign* : Indicator variable equal to one if the largest owner is foreign. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 10** Individual ownership fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		7.5	19.7	13.3	7.9	18.3	12.4	8.8	20.0	13.0	5.7	19.9	13.7
Industry	Energy	5.1	10.0	6.1	8.3	10.6	7.1	6.5	13.0	7.1	3.2	7.9	5.1
	Material	6.3	7.5	5.3	9.6	10.4	10.1	6.9	9.5	5.7	4.9	5.4	4.0
	Industry	6.2	13.4	10.0	8.1	16.2	12.4	6.2	14.2	10.3	5.6	12.1	9.1
	ConsDisc	15.1	19.8	15.5	35.1	26.7	19.8	18.3	22.4	17.2	7.0	16.1	13.8
	ConsStapl	10.5	11.5	9.9	11.8	9.4	8.2	9.8	10.6	9.7	10.6	12.8	10.2
	Health	11.8	16.9	11.6	8.5	5.5	5.0	9.8	17.1	11.7	14.0	20.1	12.7
	Finan	14.2	35.4	41.2	15.1	25.7	16.4	12.2	31.2	23.3	15.3	40.9	47.8
	IT	13.3	21.4	18.5	12.2	20.9	18.9	15.7	26.3	24.5	12.0	18.4	17.3
	Telecom	1.4	2.2	1.7				1.1	1.2	1.1	1.5	2.7	1.9
Util	5.8	7.7	6.9				7.1	7.1	7.2	5.1	7.9	6.7	
Size	1 (small)	29.3	34.1	27.0	24.6	26.7	21.8	29.5	32.6	25.4	30.6	37.3	39.2
	2	21.2	21.7	18.5	21.1	20.7	16.9	21.7	22.7	19.5	21.0	21.4	18.4
	3	14.6	15.2	11.5	13.0	13.9	7.3	15.3	15.9	12.1	14.7	15.2	12.0
	4 (large)	5.9	7.8	5.0	9.8	11.2	7.7	6.8	8.1	5.6	4.2	6.5	4.3

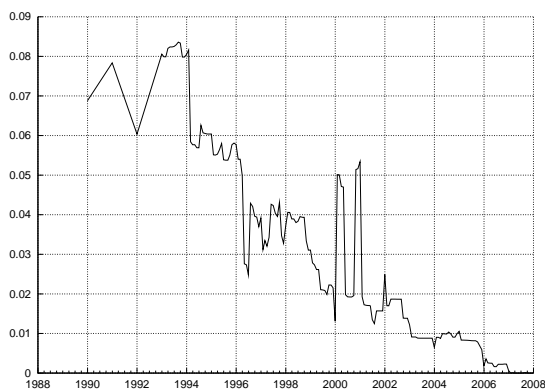


We describe *Individual ownership fraction* : Fraction of company owed by individual investors. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 11** Largest owner is individual

		1989–2007			1989–1994			1995–1999			2000–2007		
		average		med	average		med	average		med	average		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		3.0	8.0	0.0	2.4	8.2	0.0	3.9	12.6	0.0	1.2	5.2	0.0
Industry	Energy	0.5	3.8	0.0	0.1	1.9	0.0	1.1	8.3	0.0	0.2	1.5	0.0
	Material	0.2	0.1	0.0	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Industry	2.9	4.7	0.0	11.6	8.8	0.0	3.2	7.7	0.0	0.2	1.7	0.0
	ConsDisc	6.9	10.1	0.0	26.5	15.6	0.0	7.2	16.3	0.0	1.0	4.6	0.0
	ConsStapl	0.6	6.3	0.0	0.0	0.0	0.0	0.7	11.7	0.0	0.7	4.9	0.0
	Health	3.3	12.3	0.0	0.0	0.0	0.0	8.2	20.1	0.0	1.2	11.1	0.0
	Finan	3.5	9.0	0.0	7.3	8.5	0.0	3.6	11.3	0.0	2.4	7.6	0.0
	IT	16.3	18.4	0.0	18.8	19.1	0.0	26.6	29.5	0.0	9.2	11.2	0.0
	Telecom	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Util	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	
Size	1 (small)	10.5	11.2	0.0	8.7	7.1	0.0	18.3	19.2	0.0	6.2	7.3	0.0
	2	9.3	9.3	0.0	11.7	10.6	0.0	13.8	14.1	0.0	5.8	5.9	0.0
	3	7.9	8.4	0.0	8.5	9.2	0.0	12.6	13.2	0.0	4.7	5.1	0.0
	4 (large)	2.0	3.4	0.0	6.5	6.5	0.0	1.9	3.7	0.0	0.7	2.3	0.0

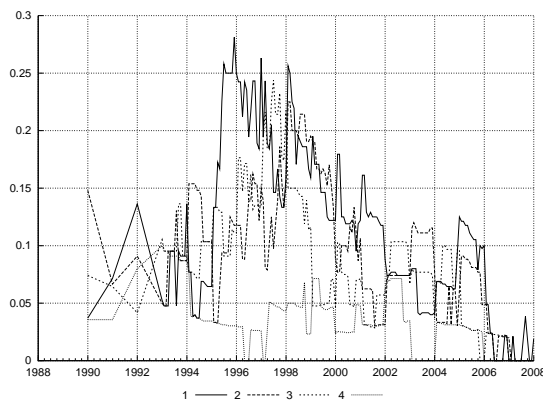
Value weighted average



Equally weighted average



Averages stratified by firm size

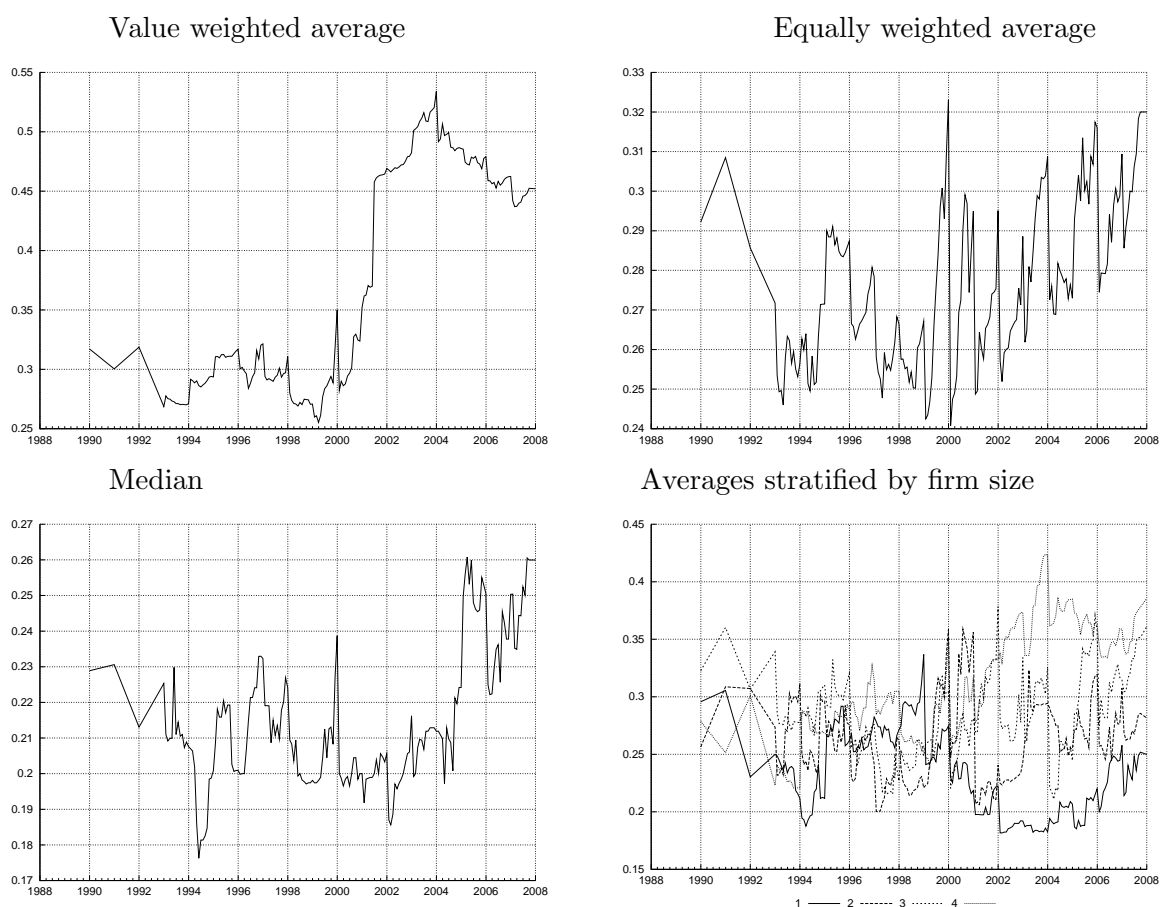


We describe *Largest owner is individual* : Indicator variable equal to one if the largest owner is individual. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

## 2.2 Ownership concentration

**Figure 12** Largest Owner

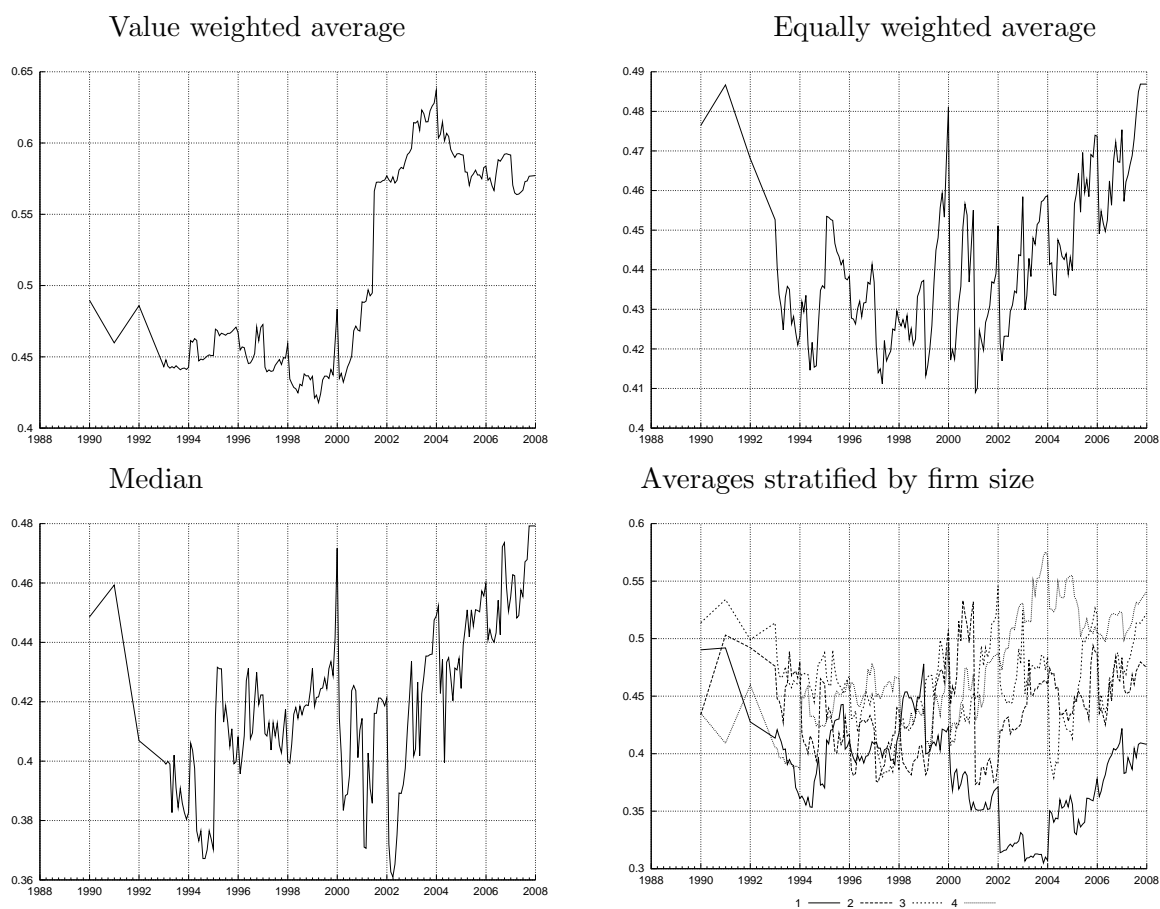
		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt		med	snitt		med	snitt		med	snitt		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		37.2	27.6	21.0	32.0	26.2	20.8	29.4	27.0	21.0	44.8	28.3	21.1
Industry	Energy	38.9	32.8	27.7	19.2	30.4	28.2	26.1	29.7	24.7	53.0	35.5	29.8
	Material	20.6	30.6	24.6	20.8	25.7	18.2	20.9	32.8	23.2	20.4	30.7	27.8
	Industry	39.2	35.0	30.2	40.6	27.4	21.6	40.3	32.9	26.1	38.1	38.6	34.5
	ConsDisc	35.5	29.9	29.5	26.9	29.0	24.0	27.1	28.6	29.5	43.5	31.0	31.2
	ConsStapl	16.4	28.3	24.8	15.1	23.9	20.7	15.2	26.8	24.8	17.6	30.7	26.0
	Health	17.3	26.7	20.9	13.6	40.3	42.7	11.7	24.4	16.8	21.9	24.2	21.2
	Finan	31.8	17.0	9.7	23.9	18.9	10.0	28.2	17.6	9.6	36.5	16.1	9.7
	IT	26.5	22.6	14.8	41.0	25.7	19.9	26.8	22.7	14.8	22.0	21.5	14.6
	Telecom	49.2	44.8	34.5				24.7	24.4	25.0	60.7	54.6	54.0
Util	28.0	25.6	27.5				14.4	14.4	11.8	35.0	31.3	30.7	
Size	1 (small)	24.9	23.2	16.0	23.0	22.7	17.5	27.2	27.1	20.0	24.1	20.9	12.6
	2	26.7	26.2	21.6	26.9	26.8	22.0	26.3	25.1	21.7	26.9	26.7	21.4
	3	28.5	28.4	20.9	29.1	29.1	23.3	26.4	26.5	18.9	29.7	29.3	21.6
	4 (large)	38.4	31.2	25.0	28.5	25.4	16.9	30.0	28.4	23.5	46.8	34.7	31.1



We describe *Largest Owner* : Fraction of the company owned by its largest owners. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 13** Three largest owners

		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt		med	snitt		med	snitt		med	snitt		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		50.9	44.1	41.9	48.2	43.4	38.5	44.8	43.4	41.8	56.6	44.7	43.1
Industry	Energy	51.9	49.8	49.8	35.7	48.0	47.5	43.1	47.9	47.4	62.3	51.6	52.3
	Material	38.4	50.9	47.7	36.7	40.7	32.6	37.0	49.1	45.6	39.9	55.0	59.1
	Industry	54.5	53.5	54.0	58.2	46.1	41.8	54.5	50.9	49.6	53.4	57.4	55.9
	ConsDisc	51.3	50.3	50.7	45.3	48.7	46.0	43.7	47.3	45.7	57.9	52.6	52.7
	ConsStapl	30.1	44.5	42.4	30.3	39.4	37.3	28.4	42.4	40.8	31.2	47.4	46.4
	Health	32.1	42.7	40.0	27.4	52.9	55.3	25.5	42.3	40.5	37.7	39.9	39.1
	Finan	45.8	29.1	20.4	40.5	33.4	23.6	44.0	29.5	21.1	48.5	27.5	19.4
	IT	41.8	38.2	32.0	57.6	42.4	33.9	39.6	38.2	31.5	38.5	37.0	31.7
	Telecom	67.5	63.7	64.3				63.6	60.8	64.4	69.4	65.1	63.0
Util	62.4	58.8	66.1				35.3	35.3	34.3	76.2	70.8	71.0	
Size	1 (small)	40.8	38.1	33.3	39.6	39.1	33.9	42.4	41.7	38.6	40.1	35.6	26.2
	2	44.1	43.7	43.9	44.6	44.6	43.4	42.7	41.6	43.1	44.9	44.8	44.6
	3	45.9	45.8	43.5	47.8	47.4	44.7	43.9	44.0	42.3	46.6	46.4	44.2
	4 (large)	51.7	47.2	40.9	44.8	41.6	35.3	45.1	44.7	39.7	57.9	50.5	51.7



We describe *Three largest owners* : Fraction of the company owned by its three largest owners. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median(med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.



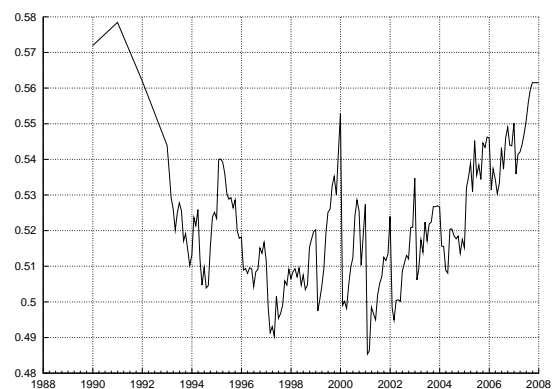
**Figure 14** Five largest owners

		1989–2007			1989–1994			1995–1999			2000–2007		
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		57.5	52.1	51.4	55.7	52.6	49.4	52.3	51.5	51.5	62.2	52.3	52.6
Industry	Energy	58.7	57.4	58.3	45.3	57.6	58.0	51.7	55.8	56.6	67.2	58.4	60.8
	Material	45.2	57.7	55.4	43.8	47.9	37.7	43.4	55.3	54.2	46.8	62.1	65.8
	Industry	61.0	61.8	62.3	64.9	55.6	55.2	61.1	59.4	59.9	59.8	65.1	65.2
	ConsDisc	59.2	59.2	59.6	55.9	58.6	58.8	52.5	56.4	57.6	64.4	61.2	63.3
	ConsStapl	38.0	52.8	52.1	39.1	48.1	47.7	36.1	50.1	49.9	38.9	55.8	56.4
	Health	39.9	50.9	48.4	36.2	59.3	61.4	33.5	50.8	51.6	45.0	48.5	47.1
	Finan	52.5	36.2	26.8	48.8	42.1	33.9	50.7	36.5	28.1	54.8	34.2	25.3
	IT	49.5	46.9	42.4	65.0	51.9	44.5	47.2	46.8	42.5	46.4	45.5	41.1
	Telecom	74.4	71.0	71.3				77.2	73.8	78.1	73.1	69.6	66.7
	Util	71.5	69.1	74.9				49.9	49.9	49.7	82.6	79.0	80.0
Size	1 (small)	48.9	46.0	44.3	49.3	48.6	45.3	50.5	49.5	49.2	47.8	43.1	34.8
	2	52.7	52.3	54.1	54.2	54.2	55.2	50.7	49.6	52.6	53.6	53.4	55.0
	3	54.0	54.0	53.7	57.1	56.8	56.9	52.5	52.6	52.9	54.1	54.0	53.6
	4 (large)	58.0	54.4	49.1	52.5	49.6	44.7	52.4	52.4	48.3	63.3	57.0	58.7

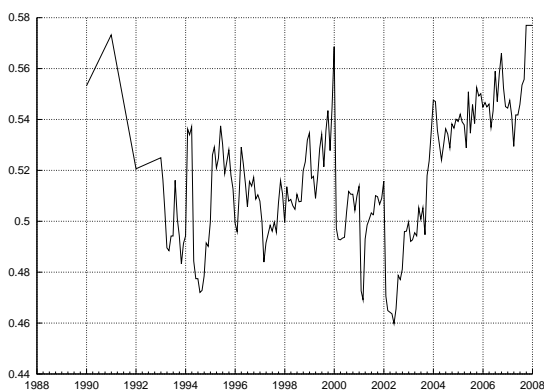
Value weighted average



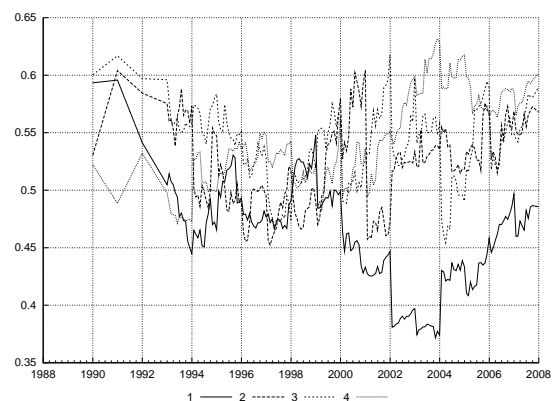
Equally weighted average



Median



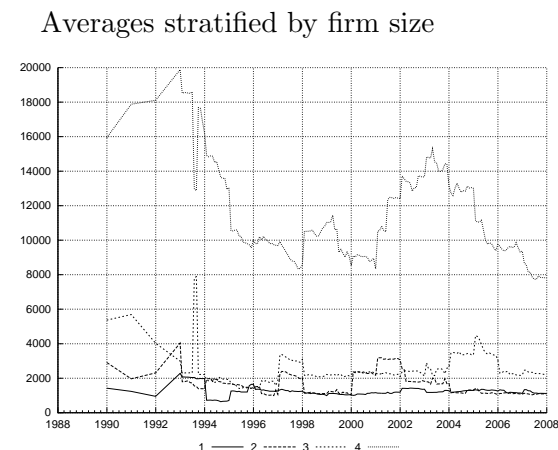
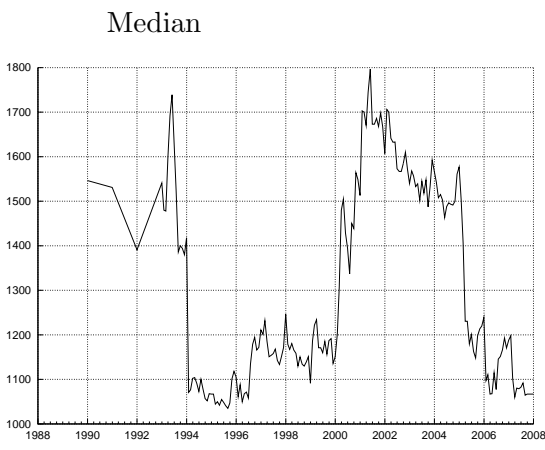
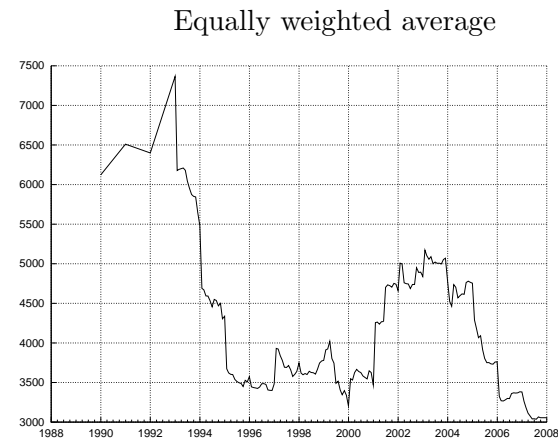
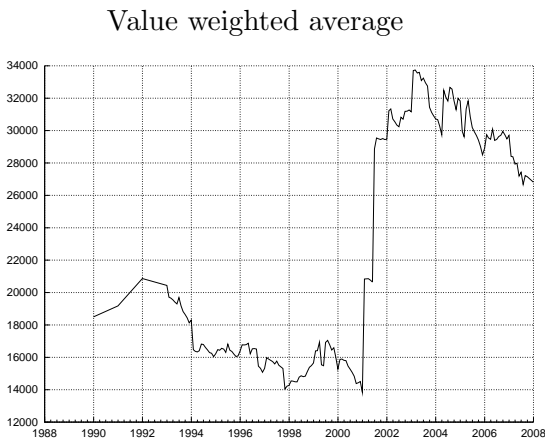
Averages stratified by firm size



We describe *Five largest owners* : Fraction of the company owned by its five largest owners. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9. In the table numbers are in percent, the figures show actual numbers.

**Figure 15** Number of owners

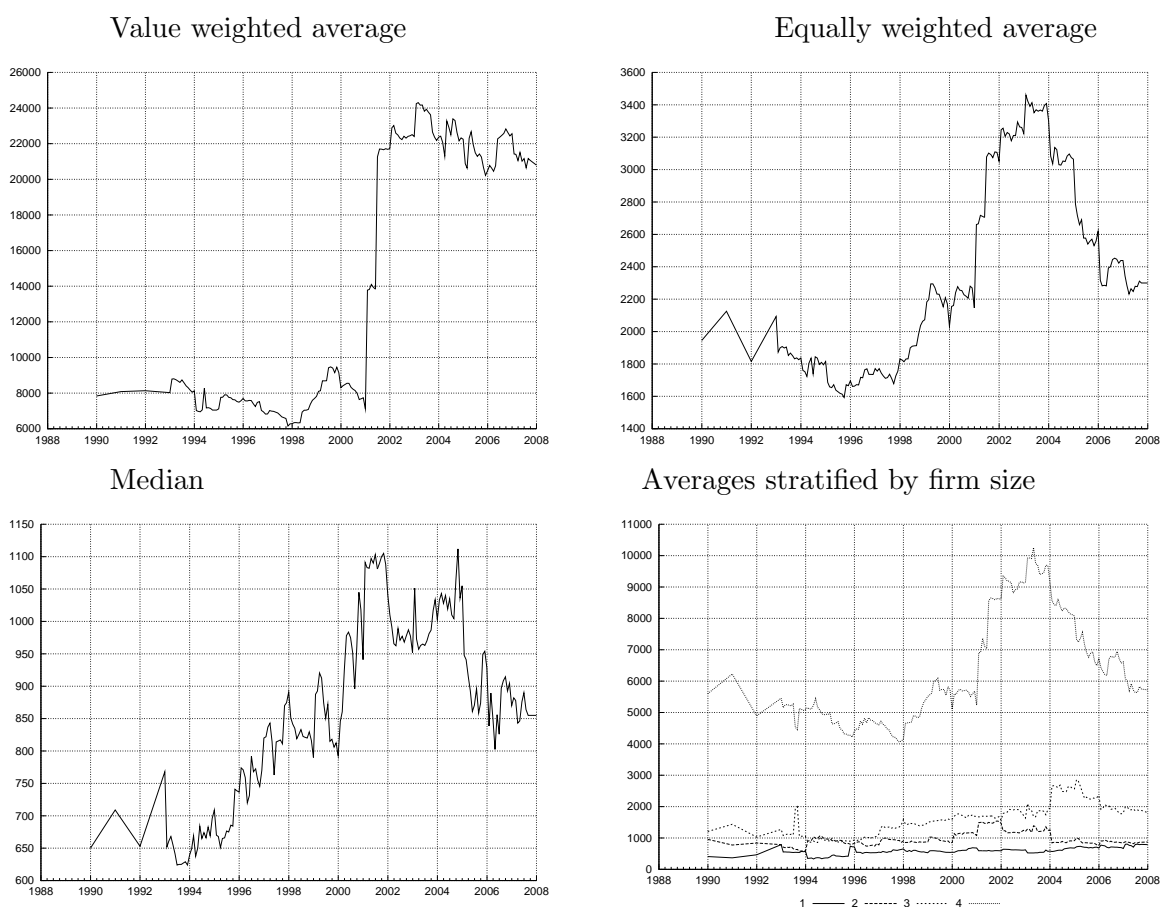
		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt		med	snitt		med	snitt		med	snitt		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		22396	4161	1198	19902	5439	1388	15819	3595	1151	27894	4142	1498
Industry	Energy	24638	5579	1618	15927	4782	1386	8855	3911	1362	37306	6880	2338
	Material	15587	9205	3968	14101	10383	10449	13040	7087	3380	17655	10205	4010
	Industry	16695	3041	1384	20410	3220	1694	20422	2716	1131	13210	3194	1440
	ConsDisc	5949	2676	900	15644	6630	870	5475	2393	810	3365	1680	963
	ConsStapl	27128	9498	1910	24961	12784	1806	25446	10671	1662	28847	7771	2299
	Health	6361	2978	1431	9876	5936	5623	8058	3377	1132	4230	1842	1286
	Finan	16626	4542	1164	20185	7503	1422	21908	5231	1452	12194	3220	1004
	IT	3700	2080	1184	2663	1608	1576	2256	1369	798	4931	2674	1682
	Telecom	29654	26330	20236				1491	1369	1332	42837	38280	46448
	Util	8354	7347	8162				10011	10011	9824	7507	5987	4700
Size	1 (small)	1289	1247	806	1306	1379	884	1119	1213	833	1393	1229	780
	2	1787	1659	886	1997	1879	984	1416	1447	797	1960	1729	920
	3	2582	2507	1574	3055	2838	1682	2200	2129	1244	2685	2650	1723
	4 (large)	25582	11510	4344	21314	15955	6210	18780	9893	3980	31196	11218	3933



We describe *Number of owners* : Total number of owners in company. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median(med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9.

**Figure 16** Number of owners ( $\geq 100$ )

		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt	ew	med	snitt	ew	med	snitt	ew	med	snitt	ew	med
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		13956	2327	860	9772	1853	654	7511	1847	814	19884	2775	965
Industry	Energy	15923	3240	1302	6417	1925	924	4033	2041	1039	26343	4398	1998
	Material	6672	3980	2222	5436	3987	3558	4346	2587	1926	8525	4867	2284
	Industry	8130	1601	704	10633	1534	615	9359	1369	717	6600	1769	712
	ConsDisc	2004	1060	676	1379	815	378	1908	965	550	2251	1193	794
	ConsStapl	15206	5131	1653	8744	4621	1116	11615	4764	969	19423	5517	2083
	Health	4955	2316	1363	6866	4068	3883	6022	2567	1055	3704	1633	1220
	Finan	7605	2256	778	5546	2186	714	10584	2697	952	6317	1995	713
	IT	2824	1551	920	737	546	437	1795	1095	682	4102	2141	1457
	Telecom	28947	25798	19088				1379	1280	1279	41851	37536	45436
	Util	5746	4995	5410				6900	6900	6772	5157	4022	3166
Size	1 (small)	633	589	509	491	463	423	575	553	465	712	650	533
	2	1027	972	643	875	818	510	887	882	643	1161	1075	650
	3	1650	1610	1160	1172	1094	770	1297	1256	1056	2017	1989	1442
	4 (large)	15828	6281	2971	9308	5142	3364	8866	4826	2864	22214	7548	3051

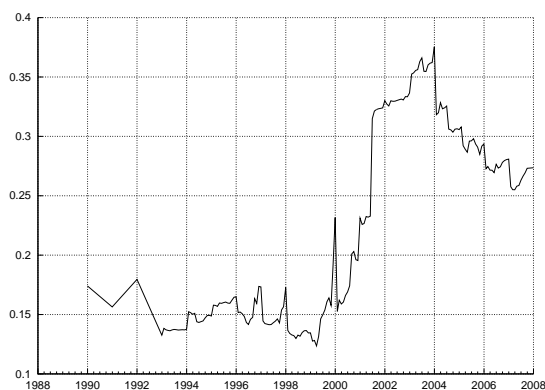


We describe *Number of owners ( $\geq 100$ )* : Total number of owners in company, only counting owners with a minimum of 100 shares. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9.

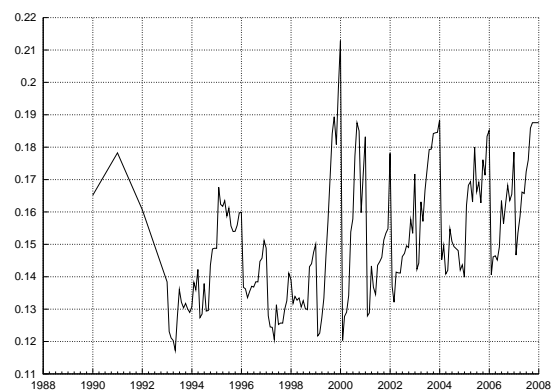
**Figure 17** Herfindahl index

		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt		med	snitt		med	snitt		med	snitt		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		0.22	0.15	0.08	0.17	0.14	0.08	0.15	0.15	0.08	0.29	0.16	0.09
Industry	Energy	0.24	0.18	0.12	0.08	0.16	0.11	0.13	0.15	0.11	0.35	0.21	0.15
	Material	0.11	0.19	0.14	0.08	0.12	0.05	0.09	0.19	0.10	0.13	0.20	0.19
	Industry	0.21	0.20	0.14	0.22	0.14	0.09	0.22	0.19	0.12	0.21	0.23	0.16
	ConsDisc	0.20	0.16	0.13	0.12	0.15	0.10	0.12	0.14	0.11	0.28	0.17	0.14
	ConsStapl	0.06	0.14	0.09	0.05	0.12	0.07	0.05	0.12	0.09	0.07	0.16	0.10
	Health	0.07	0.15	0.08	0.07	0.29	0.32	0.05	0.16	0.07	0.08	0.10	0.08
	Finan	0.21	0.09	0.02	0.13	0.10	0.04	0.15	0.09	0.03	0.28	0.08	0.02
	IT	0.15	0.12	0.05	0.26	0.13	0.06	0.17	0.12	0.05	0.11	0.11	0.05
	Telecom	0.33	0.29	0.18				0.15	0.14	0.15	0.41	0.37	0.30
Util	0.18	0.15	0.18				0.06	0.06	0.06	0.24	0.20	0.20	
Size	1 (small)	0.13	0.12	0.06	0.12	0.12	0.06	0.15	0.15	0.07	0.13	0.10	0.04
	2	0.14	0.14	0.09	0.14	0.14	0.09	0.14	0.13	0.09	0.15	0.14	0.10
	3	0.16	0.15	0.09	0.16	0.16	0.10	0.14	0.14	0.09	0.16	0.16	0.09
	4 (large)	0.23	0.17	0.09	0.14	0.13	0.06	0.15	0.15	0.08	0.30	0.20	0.14

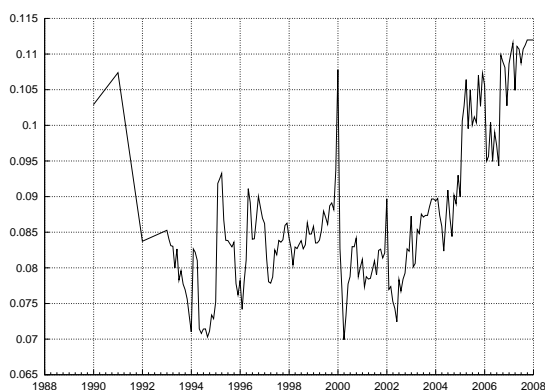
Value weighted average



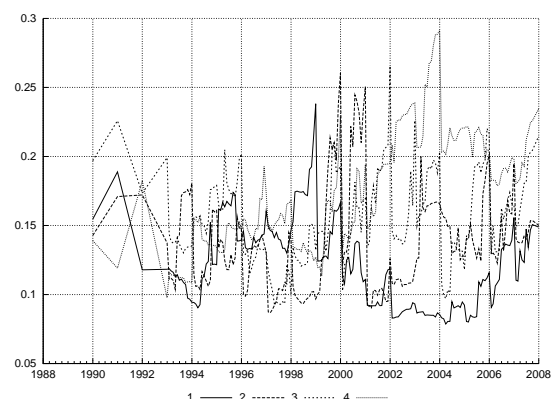
Equally weighted average



Median



Averages stratified by firm size

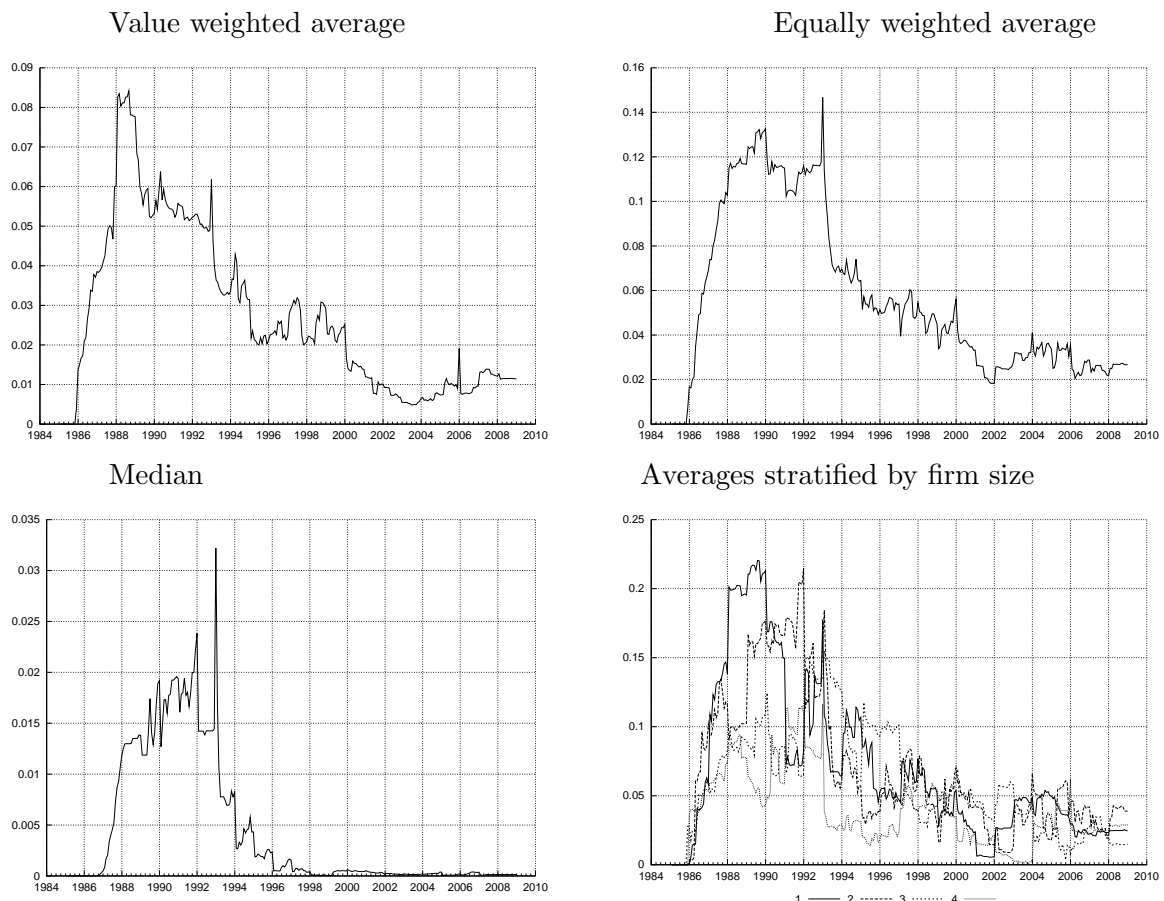


We describe *Herfindahl index* : Measure of ownership concentration, sum of squared ownership fractions. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with montly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Data from the Norwegian Securities Registry (VPS). Data from 1989:12–2007:9.

## 2.3 Inside owners

**Figure 18** Insider fraction

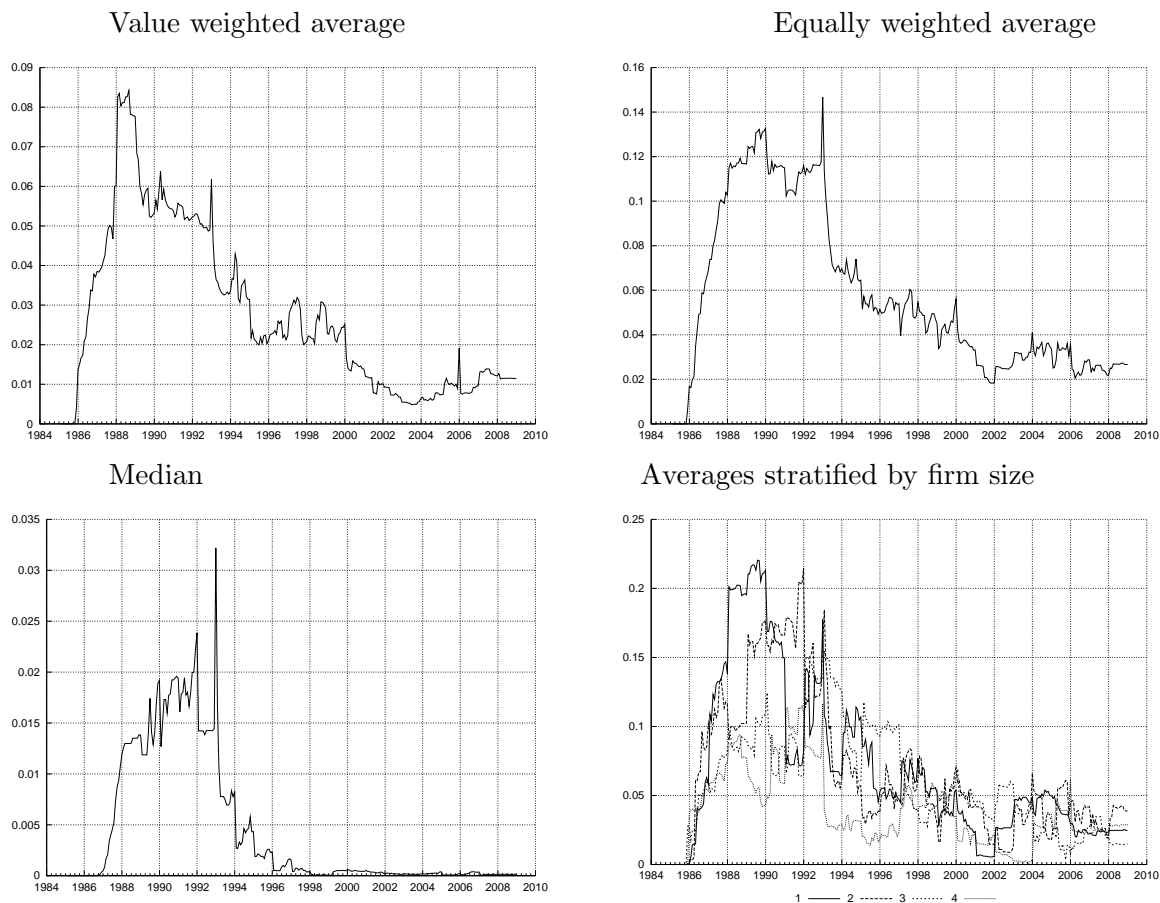
		1989–2007			1989–1994			1995–1999			2000–2007		
		vw	ew	med	vw	ew	med	vw	ew	med	vw	ew	med
All		2.7	5.7	0.0	2.8	10.3	1.4	2.4	5.0	0.1	1.0	2.9	0.0
Industry	Energy	3.1	6.4	0.1	8.7	15.4	2.0	2.5	6.4	0.1	0.4	1.6	0.0
	Material	0.4	2.3	0.1	0.7	3.9	0.8	0.4	3.3	0.1	0.0	0.9	0.0
	Industry	1.9	6.7	0.2	2.1	12.0	2.5	2.9	6.4	0.3	0.8	3.1	0.0
	ConsDisc	5.3	5.4	0.3	11.6	8.4	1.0	4.2	6.7	0.3	0.7	2.1	0.3
	ConsStapl	3.4	4.6	0.1	3.6	5.4	2.9	3.8	5.7	0.1	1.0	1.5	0.0
	Health	3.5	3.0	0.1	6.0	3.7	2.4	0.3	1.7	0.0	0.9	2.4	0.1
	Finan	4.2	5.3	0.0	7.8	8.6	0.8	2.1	2.8	0.0	2.7	3.9	0.0
	IT	3.3	6.7	0.2	4.4	8.4	0.7	3.0	4.0	0.0	3.7	4.3	0.2
	Telecom	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Util	0.1	0.2	0.1				0.0	0.0	0.0	0.1	0.2	0.2	
Size	1 (small)	7.3	7.0	0.1	13.8	12.7	1.5	6.0	5.7	0.0	3.2	3.1	0.1
	2	6.5	6.9	0.2	12.2	13.4	3.6	5.1	5.0	0.2	3.6	3.5	0.1
	3	6.4	6.0	0.2	11.5	10.3	1.5	7.0	6.8	0.2	3.6	3.4	0.0
	4 (large)	2.0	3.9	0.0	3.4	6.2	0.6	1.6	3.6	0.1	0.6	2.1	0.0



We describe *Insider fraction* : Fraction of company owned by insiders. The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Insider data is collected from mandated reports to the stock exchange of insider transactions. Data from 1986:12–2008:12. In the table numbers are in percent, the figures show actual numbers.

**Figure 19** Primary Insider fraction

		1989–2007			1989–1994			1995–1999			2000–2007		
		snitt		med	snitt		med	snitt		med	snitt		med
		vw	ew		vw	ew		vw	ew		vw	ew	
All		0.8	1.9	0.0	1.3	1.6	0.0	1.1	2.4	0.0	0.8	2.5	0.0
Industry	Energy	0.4	1.4	0.0	0.2	0.5	0.0	0.4	2.7	0.0	0.5	1.8	0.0
	Material	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.5	0.0
	Industry	1.0	3.1	0.0	0.7	3.8	0.0	2.1	3.3	0.0	0.9	3.3	0.0
	ConsDisc	2.0	2.1	0.1	4.2	1.2	0.0	3.7	4.3	0.2	0.4	2.2	0.3
	ConsStapl	0.8	1.3	0.0	1.0	1.5	0.1	0.9	1.7	0.0	1.0	1.4	0.0
	Health	0.3	0.9	0.0	0.5	0.3	0.1	0.1	1.4	0.0	0.5	1.6	0.0
	Finan	0.8	1.3	0.0	0.1	0.2	0.0	0.3	0.6	0.0	1.6	2.7	0.0
	IT	2.0	2.5	0.0	1.0	1.4	0.0	2.4	3.0	0.0	3.5	4.2	0.1
Size	Telecom	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
	Util	0.1	0.2	0.0				0.0	0.0	0.0	0.1	0.2	0.2
	1 (small)	2.4	2.2	0.0	2.2	2.1	0.0	3.3	2.7	0.0	3.0	3.0	0.0
	2	2.9	3.0	0.0	2.8	3.2	0.0	3.1	2.9	0.0	3.7	3.5	0.1
	3	1.7	1.7	0.0	0.4	0.4	0.0	3.2	3.3	0.0	2.2	2.3	0.0
	4 (large)	0.5	1.2	0.0	0.5	0.9	0.0	0.7	1.2	0.0	0.6	1.9	0.0



We describe *Primary Insider fraction* : Fraction of company owned by primary insiders (executives, members of board). The top table provides various descriptive measures: averages, equally weighted and value weighted, and median, for the whole period and for subperiods. In the figures below we show the time series development of the variable, with monthly observations for most of the period. We show equally weighted (ew), value weighted (vw) averages, together with median (med) for all companies at the OSE on given date. The figure on the lower right shows (ew) averages for four portfolios grouped after company size. Insider data is collected from mandated reports to the stock exchange of insider transactions. Data from 1986:12–2008:12. In the table numbers are in percent, the figures show actual numbers.

## References

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