

First research idea on

“The individual investor and the future stock market”

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Individual shareholder investors are generally described in academic literature to act with a short investment horizon, have psychological biases and a typical herding behavior. Previous studies have distinguished between individual and institutional investors, their trading patterns and portfolio performance. This article focus on describing the individual investor over the time period 2004 to 2010, with a special interest in the new investors coming to the stock market during this period. Earlier studies focusing on individuals have mainly been based on either aggregated trading data by brokers and/or surveys, while I base my study on the actual individual holdings from the national central registrar. The database contains ownership information on all the directly owned shares in Sweden (approx.2 million investor portfolios).

This study focus on individuals investing in the stock market for their first time during the latter years. Previous literature has described the individual investor to be declining and aging, which could be interpreted as the end of individual shareholders as stock market investors. If there is a future for the stock market as trading arena for individuals, there needs to be some rejuvenation amongst the shareholders. The study show that although the average shareholder is aging, which indicates that shareholders stick to their shares, there are new younger shareholders still attracted by the stock market. Preliminary results also suggest a decline in the gender imbalance amongst shareholders.

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1. Introduction

In recent years the western parts of the world have been struck with a financial crisis spread over most parts of Europe and North America. Investors from countries affected have seen substantial amounts being reduced from their accounts as a result of the crisis. A reasonable reaction to that might be to try to limit your loss and turn away from the stock market until it stabilizes. This would probably be especially true for individual investors, wanting to move into more secure assets with their savings. Individuals are generally looked upon as less sophisticated investors having several biases limiting their success in trading, as oppose to institutions. In this study I turn the attention towards the individual investors, before and during the current financial crisis. The study aim at giving a piece of the puzzle of who the investors are, moving into the stock market, although it has for decades been reported that individual investors are declining their interests in the stock market.

Earlier studies typically contain data from a single US brokerage house, e.g. Lease et al. (1974), among others. Therefore, the sample selection will be affected by the costumers of that particular brokerage house. Kumar and Lee (2006) made a more recent study and although it is made on a large sample of 1, 8 million investors, it still contains holdings of one single brokerage house. My study has similar number of investors presented in the data (~2 million unique individual shareholders). However, this study uses data of all shares directly owned by individuals to companies with primary listing on *NasdaqOMXS (and First North)* i.e. a study of a country rather than a brokerage house.

Lease et al. (1974) claim, based on Klemkosky and Scott (1973), that American individuals have been net sellers of shares from the year 1959 up until their study was presented in 1974. Schlarbaum et al. (1978) add to that by extending the time frame to 1978 for the US market, with the same pattern. Davis Evans (2009) takes it even further by claiming that the American retail investor is dying. In this study I am looking for signals of European investors to see if they follow their American equivalent on the road to extinction.

Statistics Sweden and *Swedish Financial Supervisory Authority* (2013) report that foreign owners hold between 33, 9-38, 0% of all shares in the Swedish stock market during the sample period. More than 50% of the shares owned by foreigners are held by owners in the US and UK according to the same report. *Statistics Sweden* and *Swedish Financial Supervisory Authority* (2013) also report the Swedish households to own 13, 3-15, 7 % of the shares for the sample period. However, according their report they do not consider whether the foreign investor is an institution or an individual. The main reason for this might be that

foreign individuals are believed to be a limited part of the foreign investors, as the institutions undisputedly holds the majority of the foreign investments in Sweden. Nevertheless, the foreign individuals deserve to be represented in this study in order to give a picture of all individuals on the Swedish stock market. *Statistics Sweden* only study individual holdings for which the number of shares in the studied company exceeds 500 shares, without considering the portfolio value. However, in this study I will study all individual holdings regardless of the number of shares in each company the investor has.

Burnie and DeRidder (2009) use the same source of ownership data as presented in this study. They focus on institutional ownership structure in Sweden over the years 2000 to 2002 and present a picture of the total ownership development over those years. In their study there is some support of the displacement of individual shareholders in benefit of institutions, foreign and domestic. This would suggest that the pattern in Sweden is similar to US, when considering individual shareholders as diminishing owners of companies in favor of institutions.

De Bondt (1998) express two main reasons for studying individuals actions in the stock market and not only there believes. Firstly the investment of the individual affects the wellbeing and secondly, with ever larger responsibility for your own pension, the future wellbeing of your retirement is also seriously affected. In Sweden as in many countries the responsibility of the pension savings has turned more towards the individual rather than the government over the last decades. However in the data for this study the pension savings in mutual funds is not presented, only directly owned shares.

To the best of my knowledge, this is the first paper to examine this issue in a country-based enumeration study of domestic and foreign individual investors on recent European data. The main contribution of this paper is the level of detail in the data presented, which open opportunities to explore the characteristics of the individual investor and their holdings in new ways. However, in this first version of the paper there are still many questions to be asked and examined.

The remainder of the paper proceeds as follows: The next section describes this study in relation to a selection of previous studies. Section 3 describes the data, sample, sources and methodology, Section 4 presents the results and analyses the relationship between stock ownership and individual characteristics, Section 5 contains concluding remarks.

2. Previous studies

Earlier studies might have had difficulties deciding which one of the adults in a household is the rightful owner of the share, since brokerage houses often have one account per household. One way of dealing with this issue is conducting surveys to known households as in e.g. by Lease et al. (1974). Instead of studying households and speculate on who might be the owner of the share, I study the rightful individual owner registered to the share. Thereby, I hope to get a fair picture of the actual owner of the share, even though tracing the overall household economy will be out of the question since the data have no record of the composition of the households. Instead by studying the rightful owners and not households other questions can be asked, gender balance, age, income, similarities and differences to name a few. Lease et al. (1974) conclude that 80-90% of the investment decision-makers are men, a result that might be interesting in comparison with this study.

Odean (1998) describes traders as overconfident and therefore carrying dead weight losses, since they trade too much. An effect of these overconfident traders is according to Odean (1998) that the market underreacts to relevant information and overreacts to irrelevant information. Studying gender differences Barber and Odean (2001) show that men overtrade more than women. The effect of overtrade is that men loose more money than women because of their excessive trading. Barber and Odean (2000) also present evidence that individual investors as a group underperform against relevant benchmarks. The worst underperformers were the one who traded the most.

Barber and Odean (2001) claim that individuals expect their portfolio to beat the market, men have the highest expectations, but both men and women expect themselves to beat the market. In their dataset they proxy the gender of the investor by identifying the name of the person who opened the households account. If they could identify the person opening the account as a man or woman, they use that as gender of the investor. In the study undertaken in this paper I use the actual holder of the stock instead of holder of household account, and through their identification number the gender is determined with precision with the gender the person had when born alternatively when they got a residence permit. Barber, Odean and Zhu (2009) show that individual investors trading is driven by active own decisions and not as a reaction to institutional trading. This supporting the idea of studying individuals apart from institutions and not just the net buyer or seller during a bull (bear) market.

2.1 Earlier studies of Scandinavian investors

Scandinavian studies of individuals have an advantage to American when it comes to data availability. Prior research on Swedish data e.g. Massa and Simonov (2006) on similar data as this study (from the late 1990's), show that investors earn strong returns on holdings closely related to them, either geographically or professionally. Massa and Simonov (2006) use a data set with a representative sample (3%) of the Swedish population the Longitudinal Individual Data for Sweden (LINDA) to describe income and holdings other than shares. In comparison, in this study I use data on the governmentally reported income statement from all shareholders in Sweden. The results of Massa and Simonov (2006) also show difference between high wealth investors and low wealth investors, where the high wealth investors is more diversified which could support results showing correlation between investor sophistication and wealth. Evidence for geographic home bias to be closely linked to individual investors have support in numerous studies e.g. Huberman (2001), Keloharju (2001), Dahlquist and Robertsson (2001) and more recent by Seasholes and Zhu (2010).

Calvet, Campbell and Sodini (2007) describes the probability of a Swedish household to hold shares is dependent on sophistication of the household, where low education and wealth households are less likely to invest in shares. On the other hand they also report that sophisticated Swedish households take on larger losses due to underdiversification than less sophisticated households. That might partly be explained by their result that less sophisticated households rather invest in managed funds. In a more recent study Calvet, Campbell and Sodini (2009) use a Swedish database, in an earlier time-frame, and show that less sophisticated households sell winners and keep losers. Calvet et al. (2009) base their study on a random sample of 100 000 households in Sweden and their wealth invested in the financial market. Whilst these studies focus on households I study individuals, which naturally occasionally is the same, but since I track the actual individuals' stockholdings, the level of detail is higher and linked to a unique subject/person.

Grinblatt and Keloharju (2001) study why investors trade based on Finnish data, and find evidence on amongst other things a gender effect supporting previous studies e.g. Barber and Odean (2001) on difference in trading patterns between men and women. However, the differences are not as large for selling but rather for buying shares. This is explained due to men being more active traders. Grinblatt and Keloharju (2001) find that larger portfolios are positively correlated to more active trading behavior. They also find that the propensity to buy stocks is larger for men rather than women. Grinblatt and Keloharju (2001) show that households to a larger extent than institutions have a contrarian investment behavior.

Considering Grinblatt and Keloharju, my study use similar data exploring the holdings of Swedish men and women before and during the current financial crisis.

In Sweden the employee has to take some of the responsibility of their own pension paid from their employer and the government, a part from the individuals own pension savings. This system was introduced at the turn of the century and replaced a system where the government took more responsibility of the base-level pension of all Swedish citizens. Cronqvist and Thaler (2004) describes this new system to be associated with several limitations and constraints. Swedish pension funds have been studied by e.g. Karlsson and Nordén (2007), who present a home bias among individual investors in their pension fund investments. My study will complement these studies by focusing on the directly owned shares of individual shareholders and with a more recent timeframe, surrounding the ongoing financial crisis in order to study new/first time investors coming to the stock market.

3. Data and methodology

In Sweden every citizen has an identification number, either given by birth or when the residence permit is issued. Sweden is one of few countries where the information in the identification number reveals personal information, e.g. when you were born/age, gender and for most citizens even in which county you were born (birthdate between January 1947 January 1990), just by looking at the number.

3.1 Ownership data

Availability of data, among other things, makes it especially interesting to study Sweden from a shareholder perspective. As described in Abrahamson et al. (2012), in contrast to many other countries, there is by law only one body which monitors stock ownership in all public firms of Sweden, the Central Security Registrar *Euroclear Sweden*. For this study I have collected the ultimate ownership data for all firms, listed on the SSE from *Euroclear Sweden* and compiled as of the end of each quarter, beginning in 2006 to the end of 2010. For the period 2004-2006 the data is semi-annually reported. The data is detailed as it enables examination of direct holdings, both by cash flows and voting rights, of both institutional and individual investors. For each individual investor I obtained a unique identification number enabling me to examine total stock holdings across all firms as well as age, sex, place of birth and current residence. I have also collected annual income statements, for all individuals within my sample, from the Swedish Tax authorities *Skatteverket* to control for income.

The semi-annual frequency of the data for this study disables me to analyze the activity around the turn of the year, as previously studied by e.g. Ritter (1988) and Rozeff and Kinney (1976). Neither can it reveal the trading activity between the reporting periods, although the advantages in investor characteristics and their actual holdings make the study interesting.

3.2 *Individual shareholders in Sweden*

I construct my sample of new individual investors by eliminating all individuals owning any stock during the years 1999-2003. The shareholders buying a share from January 1st 2004, and hadn't owned a share prior is identified as a *new* shareholder. I define individual shareholders as shareholders, with personal identification number, holding the stock in their name not through their or other corporations. Shareholders that previously had shares but emptied their "stock accounts" and years later move back in the stock market are not considered as new investors the second or more time they come back. For the studied period January 1st 2004 to 31st of December 2010, the population of Swedish individuals holding shares is 1 942523, presented as roughly 1, 9 million in Table 1. The sample of new Swedish individual shareholders consists of 179 772 for the same period (~8% of the total population).

For foreign individual investors the data in this study does not provide information on income, age and gender, as in the Swedish case, although the individual investor is traceable through the sample years by an identification number. Thereby, it is still possible to trace the development of their portfolios and the number of shares they possess in Sweden.

4. **Empirical results**

The US sample of Barber and Odean (2001) consists of 79% men and 21 % women with the average household having 4 stocks worth \$47000, with the median significantly lower at 2, 6 stocks worth \$16000. The Swedish individual shareholders have on average stocks worth 257 384 SEK which corresponds to ~ \$40 000 for the population, although the Swedish population holds outliers with a portfolio value of more than \$ 1 Billion. The number of companies in their Swedish stock portfolio is on average three shares for the population and two for the sample of new investors, this is consistent with Barber and Odean (2001).

My study, holds a population of roughly 2 million investors containing shareholder information on individuals with a gender balance of 58% men and 42% women in their individual holdings, without proxy for household or who was first to sign the household account. The difference in gender balance of number of shareholders might be a bit surprising comparing to the sample of Barber and Odean (2001), even though in a different country

setting it is still two countries with fairly developed stock markets. On the other hand the distribution of number of shareholders is more in line with results reported in Finnish studies. However, whether the results of gender balance are consistent because of similarities in culture or dataset composition remains to be studied. The differences in the results show a need for studies of actual holdings rather than proxies for households. I also use the individuals' income tax statements to measure their income, with mean income of 293 216SEK (~\$45 110) presented in nominal values.

Comparing individual investor patterns for shares with their pattern for mutual funds, Ivkovic', Weisbenner (2009) show that individuals sell losing funds but keep funds that have appreciated in value. In comparison to Grinblatt and Keloharju (2000) this does not seem to hold for individual investors when it comes to share trading activity, where the results are contrarian except for foreign investors. Kumar and Lee (2006) shows that even the US investors have a concentrated stock portfolio with a mean (median) of 4 (3) shares, this corresponds to the wealthiest Swedish investors. However, in Sweden the directly owned shares are kept aside from the pension savings for most Swedes because of the pension system.

4.1 Table 1

In Table 1, holdings and characteristics of all Swedish individual shareholders is presented. Note that the data presented there is raw without fine-tuning of the, consequences being that large shareholders e.g. founders of international companies such as for example *Hennes & Mauritz* with personal holdings in their own company worth more than \$10 billion (according to the annual report for *H&M* in 2006), which helps explaining the difference between mean and median.

An ever aging population of shareholders might have support from this study when considering the age of the mean(median) shareholder moving from 53(54) to 55(57) over the 7 year period in the sample. These results give some obvious answers, like people get older over the years, but they also indicate that individuals do not leave the stock market even when reaching a considerable age. In oppose to what can be seen as the rational choice of realizing the investments when moving into retirement, the shareholders seem to hold on to the shares far beyond retirement.

Ilmanen and Keloharju (1999) have studied the individual investors in Finland and report similar gender balance 55% men and 45% women over the during a two year period in the mid 1990's. Combined with my results on gender balance, it seems like the gender

balance amongst the shareholders are far more evenly distributed than reported from US studies on households. Although I still have not explored the data fully, the shareholders in Sweden and Finland hold a smaller imbalance than US studies.

At a glance but consistent in both table 1 and 2 the shareholders in the capital holds more diversified portfolios than shareholders in smaller cities and rural areas.

4.2 Table 2

Table 2 presents the sample of new Swedish shareholders which is the main focus of this study. The sample consists of 179 772 Swedish individual shareholders, 103 063 men (57%) and 76 709 women (43%). The gender difference in Sweden when it comes to participation in the stock market appears to be more balanced considering the number of shareholders than previous studies have shown on US data. This can partly be explained by the fact that this study show the rightful owner of the stock and not a proxy for household account signature. Figure 1 explores the gender difference further when it comes to number of new individuals attracted by the stock market. Figure 1 shows the relative gender development of new shareholders. Comparing this with figure 2 it might support Grinblatt and Keloharju (2001) considering men as more active buyers in a bullish market, but this needs to be more thoroughly studied in later versions of this paper.

11% of all new shareholders had reached and exceeded the typical retirement age in Sweden when they invested in the stock market as new investors. Naturally, there is a certain variation in the retirement age in Sweden, but as long-term investors they would still be very close to retirement even though they would keep working until the age of 67 or even longer. Table 2 also present the mean (median) age when entering the stock market and even though the sample period is limited the stock market seems to attract younger investors since the average age is lower in the end of the period. These results needs to be thoroughly studied, which has not been done so far in this version of the paper.

4.3 Table 3

In table 3 the holdings of foreign individual investors in Sweden is presented, 7 726 investors in total. It also shows an overview of 17 131 Swedish citizens living abroad. In Panel A the distribution of the foreign individual shareholders in Sweden is shown. The foreign investors have had a negative trend in number over the sample period, with the majority of the shareholders coming from the EU-area. Panel B. Most of the investors are from EU-member states (~58%), note that Norway is not an EU-member and therefore not

counted in the EU category. To compare, I have separated the Nordic Countries from EU/other category. The foreign individual investors of the Nordic countries holds on average 47% of the shares owned by foreign individuals, whilst Swedes living in the Nordic Countries own 23% of the shares owned by Swedes abroad. The *Other* Category for both *Panel B* and *C* is highly skewed and holds large variations e.g. with one shareholder having a portfolio value of more than 1,4 billion SEK.

5. Concluding remarks

I analyze stock ownership for a sample of individual investors in Sweden over the seven-year period 2004 to 2010. By exploiting a unique data set, with information of the ultimate holdings by individual investors in these firms, I make original contributions to the existing literature related to individual holdings as the data is sharper and more detailed than what have been used in prior studies.

The gender imbalance shown in US studies (when studied households with proxy for gender) holds even in the Scandinavian countries but is far more balanced than reported from US. There are some support in the Swedish data for US prophecies of individual investors having an ailing trend as shareholders although the stock market still attracts new younger shareholders. The individual investors in Sweden are even less diversified in their stock portfolios than equivalent US investors, although the Swedish data presented in this study does not take diversifications as holdings in e.g. mutual funds in consideration.

Table 1 Description of Data and Individual Shareholder Characteristics

This table presents summary statistics of the population of Swedish individual shareholders in Sweden over the period 2004 through 2010, in total 1,9 Million Swedish individuals are represented in the data. In Panel A, I report total number of individuals with average age, gender each year. Panels B, show the average Swedish shareholders grouped based on age, number of new shareholders in each age group respectively, #shares refers to how many different share classes/firms the shareholders invests in during his first year, Portfolio Value meaning the new investors total value of the portfolio owned by the end of the first year. Income is the total taxable income based on employment. Panel C, show the average Swedish shareholders grouped based on income. Panel D, show current place of residence with respect to city or rural location. Note that in order to highlight differences the Capital is in *Italics*, but also within the three largest cities.

Panel A: Number of Swedish individual shareholders in Sweden over the time period 2004-2010				
Year	# Shareholders	Age Mean (Median)	#Men	#Women
2004	1784382	53 (54)	1047295	737087
2005	1723697	53 (55)	1006490	717207
2006	1676986	54 (55)	976170	700816
2007	1630540	54 (56)	946563	683977
2008	1622092	54 (56)	943889	678203
2009	1608252	55 (57)	936312	671940
2010	1550575	55 (57)	897822	652753

Panel B: Portfolios and Age				
Age Groups	# Shareholders relative to population	# Shares Mean (Median)	Portfolio Value Mean (Median)	Income Mean (Median)
<20	0.01	2.65 (1)	118019 (12764)	24769 (19100)
20-35	0.15	2.56 (1)	145258 (13180)	231651 (230000)
36-50	0.25	2.83 (2)	147070 (16884)	359541 (307700)
51-65	0.32	3.36 (2)	362240 (24200)	337056 (289000)
65>	0.27	3.54 (2)	297876 (30940)	224114 (188500)

Panel C: Income groups			
Income in Thousand SEK (~Thousand \$ where 6,5 SEK=1\$)	# Shareholders relative to population	# Shares Mean (Median)	Portfolio Value Mean (Median)
>200 (30,8)	0.33	2.70 (1)	178446 (16700)
200-400 (30,8-61,6)	0.49	3.10 (2)	158073 (20210)
400-600 (61,6-92,3)	0.12	3.85 (2)	256646 (32869)
600< (92,3<)	0.6	4.77 (3)	1556617 (64910)

Panel D: Residence				
	# Shareholders	# Shares Mean (Median)	Portfolio Value Mean (Median)	Income Mean (Median)
Largest 3 Cities	1199747	3.74 (2)	798457 (31040)	336609 (283300)
<i>Capital (Stockholm)</i>	<i>579920</i>	<i>4.08 (2)</i>	<i>1412409 (39329)</i>	<i>380128 (310500)</i>
Smaller cities and rural locations	10396777	3.08 (2)	194946 (20740)	288209 (251900)

Table 2 Sample description of new Shareholder Characteristics

This table presents summary statistics for the sample of 179 772 new Swedish individual shareholders in Sweden over the period 2004 through 2010. In Panel A, I report total number of individuals with average age, gender each year. Panels B, show the average Swedish shareholders grouped based on age, number of new shareholders in each age group respectively, #shares refers to how many different share classes/firms the shareholders invests in during his first year, Portfolio Value meaning the new investors total value of the portfolio owned by the end of the first year. Income is the total taxable income based on employment. Panel C, show the average Swedish shareholders grouped based on income. Panel D, show current place of residence. Note that in order to highlight differences the Capital is in *Italics*, but also within the three largest cities.

Panel A: Number of new Swedish shareholders in Sweden over the time period 2004-2010				
Year	# New Shareholders	Age Mean (Median)	#Men	#Women
2004	21631	46 (45)	11535	10096
2005	20231	46 (45)	10363	9868
2006	24592	44 (43)	13518	11074
2007	29198	43 (41)	16949	12249
2008	31842	43 (41)	19172	12670
2009	32491	43 (41)	19830	12661
2010	19787	42 (40)	11696	8091
Total	179772		103063	76709

Panel B: Portfolios and Age				
Age Groups	# New Shareholders relative to population	# Shares Mean (Median)	Portfolio Value Mean (Median)	Income Mean (Median)
<20	0.02	2.05 (1)	85971 (6750)	31817 (24700)
20-35	0.34	2.05 (1)	31974 (7740)	231663 (236900)
36-50	0.29	2.18 (1)	68474 (11500)	341326 (300300)
51-65	0.24	2.42 (1)	95332 (16491)	319749 (281000)
65>	0.11	2.28 (1)	107971 (19592)	178311 (145700)

Panel C: Income groups				
Income in Thousand SEK (~Thousand \$ where 6,5 SEK=1\$)	# New Shareholders relative to population	# Shares Mean (Median)	Portfolio Value Mean (Median)	Income Mean (Median)
>200 (30,8)	0.34	2.18 (1)	68423 (11223)	51579 (10475)
200-400 (30,8-61,6)	0.51	2.16 (1)	77893 (13650)	222497 (27200)
400-600 (61,6-92,3)	0.11	2.31 (1)		
600< (92,3<)	0.04	2.60 (1)		

Panel D: Residence				
	# New Shareholders	# Shares Mean (Median)	Portfolio Value Mean (Median)	Income Mean (Median)
Largest 3 Cities	23219	2.34 (1)	100574 (12365)	298062 (273900)
<i>Capital (Stockholm)</i>	<i>9636</i>	<i>2.58 (1)</i>	<i>151744 (16745)</i>	<i>333231 (295800)</i>
Smaller cities and rural locations	156553	2.18 (1)	61971 (11228)	270857 (254000)

Table 3 Sample description of Individual Shareholders from outside Sweden

This table presents summary statistics for the sample of 7 726 foreign individual shareholders in Sweden over the period 2004 through 2010. The table also shows holdings of 17 131 Swedes living abroad during the same period. In Panel A, I report total number of foreign individuals (Swedish individuals living abroad), grouped based on area. Panel B, show shareholders grouped based on where the buyer is located in a relative distribution, it also shows number of shares and portfolio value, #shares refers to how many different shares/firms the shareholders invests, Portfolio Value meaning the new investors total value of the stock portfolio owned by the end of the first year. Panel C, show same as Panel B but for Swedes living abroad. Panel D, shows foreign shareholders (Swedes abroad) based on year of entry to the Swedish stock market. For all panels the portfolio value is presented in SEK (where SEK 6,5~ \$1)

Panel A: Number of foreign shareholders in Sweden over the time period 2004-2010				
Year	# Foreign Shareholders (Swedes abroad)	US (Swedes in US)	EU (except Sweden) (Swedes in EU)	Other (Swedes abroad, not EU/US)
2004	6050 (15718)	404 (2304)	3444 (8919)	2202 (4495)
2005	5765 (15537)	388 (2240)	3233 (8887)	2144 (4410)
2006	5372 (15289)	399 (2180)	3188 (8792)	1785 (4317)
2007	5283 (15055)	412 (2095)	3112 (8676)	1759 (4284)
2008	4983 (15096)	397 (2037)	2954 (8680)	1632 (4379)
2009	5003 (14884)	389 (1999)	2867 (8500)	1747 (4385)
2010	4955 (14946)	375 (1932)	2820 (8292)	1760 (4372)

Panel B: Portfolios and Area of foreign investors			
Area	# Shareholders Relative	# Shares Mean (Median)	Portfolio Value Mean (Median)
US	0.07	1,61 (1)	274255 (26804)
EU (except SE)	0.58	1,70 (1)	457494 (20827)
Other	0.35	1,61 (1)	326964 (17753)

Panel C: Portfolios and Area of Swedes abroad			
Area	# Shareholders Relative	# Shares Mean (Median)	Portfolio Value Mean (Median)
US	0.14	4,00 (2)	527859 (61250)
EU (except SE)	0.57	3,86 (2)	750512 (46712)
Other	0.29	3,70 (2)	482647 (43948)

Panel D: Number of new foreign shareholders (Swedes abroad) in Sweden over the time period 2004-2010				
Year	# Shareholders	US	EU (except SE)	Other
2004	208 (282)	14 (48)	142 (157)	52 (77)
2005	192 (218)	19 (33)	76 (139)	97 (46)
2006	416 (250)	47 (19)	286 (152)	83 (79)
2007	335 (241)	26 (28)	153 (131)	156 (82)
2008	300 (274)	24 (18)	181 (164)	95 (92)
2009	224 (211)	15 (24)	39 (115)	170 (72)
2010	209 (219)	29 (19)	93 (125)	87 (75)
Total	1884 (1695)	174 (189)	970 (983)	740 (523)

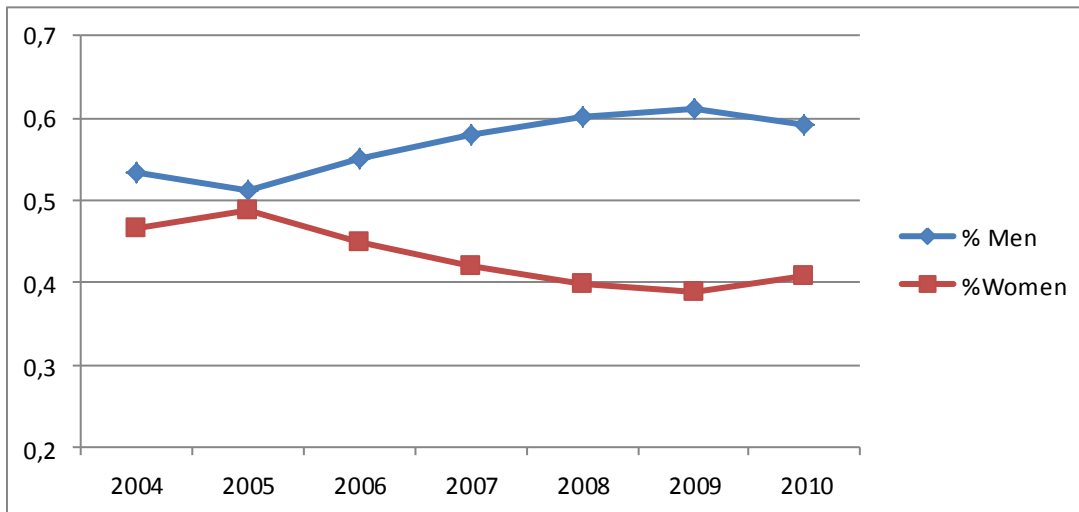


Figure 1, Number of new shareholders relative by gender over the sample period

Figure 1 show the number of new Swedish individual investors based on the gender of the owner of the shares over the period first of January 2004 to last December 2010. The figure is cut at 20% and 70%, since the relation never exceeds those values during the sample period.

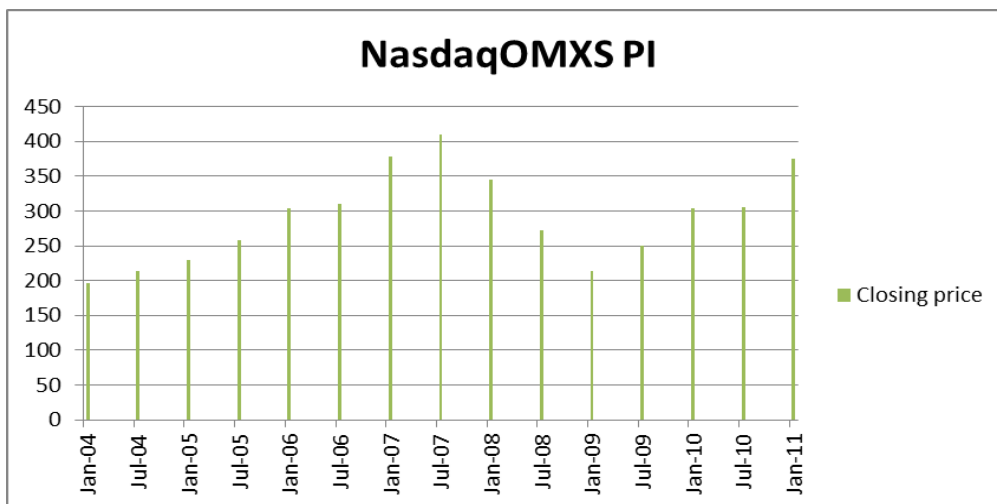


Figure 2, Semi-annual Closing price of NasdaqOMXS, Price Index

Figure 2 shows the development of the all share Price index during the sample period to give a general overview of the stockmarket in Sweden. The graph is based on semi-annual data from the NasdaqOMXS webpage.

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