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Peter Böckli

CoCos, Write-offs: Eigenkapitalschaffung mit dem Zauberstab

Peter Weber/Heinz Zimmermann/Beat Brändli

The Price Effects of the Disclosure of Significant Holdings

in Listed Companies: The Case of Groups Acting in Concert

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Bemerkungen zur Rechtsprechung

Der Sanierungszweck als Voraussetzung des Kapitalschnitts auf Null

Urteil 4A_288/2011 des Schweizerischen Bundesgerichts

vom 13. Februar 2012

Mit Bemerkungen von Ralph Straessle und Hans Caspar von der Crone

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The Price Effects of the Disclosure of Significant Holdings in Listed Companies: The Case of Groups Acting in Concert

By Peter Weber, M.Sc., Prof. Dr. Heinz Zimmermann, both Center for Economic Sciences WWZ, University of Basel and lic. iur. oec. Beat Brändli*

Starting with an outline of the way in which Swiss Stock Exchange Law treats «shareholder groups», this paper analyzes the announcement effects of major shareholdings in the Swiss stock market as reported by the SIX Swiss Exchange database on «significant shareholders» in the time period from January 1, 2008 to December 31, 2010. This includes a total of 3,617 announcements. By applying specific selection criteria, a sample of 218 announcements was collected for use in the empirical analysis, covering 61 individual investors and 32 groups of investors acting in concert. We test the hypothesis that the disclosure notifications of major shareholders have a significant impact on equity pricing for the validity of its proposition. In particular, we test whether information related to groups acting in concert is priced differently from information related to individual investors. We analyze the (cumulative) abnormal returns occurring around official announcements to investigate these issues.

Our empirical results reveal that the announcement effects of group-related disclosures are statistically and economically significant; the significance of the results strongly increases after January 2009 when the SIX Swiss Exchange launched a new electronic publication platform, thereby enabling a more immediate release of information. In the preceding sample period, the price effects are scattered over the days prior to the announcement date which makes it difficult to identify the effects. With the introduction of the new publication platform, the pre-announcement effects virtually disappear. Also, the difference between the stock price reactions between announcements related to single individuals and to groups is striking in the post-2009 sample. Furthermore, we find rather heterogeneous price patterns within both the «purchase» and the «sale» announcement categories. For example, the price effects of the «sale» sample are largely dominated by the valuation effects caused by the breakup (dissolutions) of controlling groups.

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I. Introduction

With the Swiss Federal Stock Exchanges and Securities Trading Act (SESTA), which came into force in 1997/98, the publication of public shareholdings also became mandatory (Art. 20 SESTA). This has the effect that significant changes in shareholder structure are subject to a duty of disclosure towards the company and the stock exchanges in which the securities are listed. According to the original legislation, holdings beneath or in excess of 5, 10, 20, 33½, 50 or 66½ percent of the voting rights were subject to this duty of disclosure; with the enforcement of a revision of SESTA² on January 1, 2009, the duty of disclosure was extended to encompass the thresholds

- SR 954.1.
- The federal law of July 22, 2007 (AS 2007 5291); see also the respective Notice, BBI 2006 2829 ff.



of 3, 15 and 25 percent. The duty of disclosure covers both the direct as well as the indirect purchase or sale of securities, as well as transactions that are carried out by agents «acting in concert», i.e., by a group of investors.³

The objective of disclosing holdings is to reduce asymmetries of information between shareholders and thus guarantee their equal treatment in the market. In addition, the disclosure regulations should help to prevent the secretive accumulation of shareholdings. These objectives also fundamentally apply to a group's duty of disclosure, which also covers the large number of family-owned limited companies in Switzerland. Moreover, group disclosure regulation should, in particular, prevent groups of shareholders from easily circumventing the mandatory rulings on the disclosure of substantial holdings.

Therefore, groups of shareholders, as a target of the disclosure ruling are also relevant to the present investigation, which seeks to discover whether, and if so, to what extent, a group's duty of disclosure impacts the stock price of the respective security on a regulated stock exchange. With this objective, the group's legal framework is first considered, before an attempt is made to answer the question through economic analysis. The answer is expected to provide significant implications so that the group's circum-

SESTA speaks of «concerted action» (Art. 20 para. 1) as well as of an «organized group» (Art. 20 para. 3). In the detailed ordinance (SESTO-FINMA), these terms are used in parallel (Art. 10 SESTO-FINMA). Even though the meanings of these terms «concerted action» and «organized group» do not share exactly the same definitions (e.g., the attribution of the adjective «organized» to the noun «group» signifies that the group is characterized by an organizational structure which facilitates sustained coordinated conduct; see Rolf H. Weber, in: Watter/Vogt (eds.), Basler Kommentar. Börsengesetz. Finanzmarktaufsichtsgesetz, 2. Aufl., Basel 2011, Art. 20, no. 88), these terms, which relate to the entity's structure or function, will be used co-referentially in this paper in view of the fact that function (concerted action) is implied by structure (organization).

Swiss Federal Council dispatch of February 24, 1993 regarding the Swiss Federal Act on Stock Exchanges and Securities Trading (SESTA), BBI 1993 I 1369 ff., 1416; Hans Caspar von der Crone, Meldepflicht und Übernahmeregelung im neuen Börsengesetz, in: Peter Nobel (ed.), Aktuelle Rechtsprobleme des Finanz- und Börsenplatzes Schweiz, Bd. 3, Bern 1995, 63 ff., 64.

Dispatch SESTA (Fn. 4), 1416.

Compare Dispatch SESTA (Fn. 4), 1388, 1417.

stances can be easily identified with regard to regula-

II. The Stock Exchange Act on the Group's Duty of Disclosure

Over the last few years, compliance with the duty of disclosure ruling has led to public controversy in certain cases. This is possibly associated with various Swiss takeover battles,⁷ where share derivatives were often used to circumvent the reporting requirements, ultimately necessitating legal amendments.⁸ Additionally, the exorbitantly high penalties imposed for breaching the legislation became a topic of aggravated discussion.⁹ Furthermore, one must not ignore the fact that for a few active investors such as hedge funds, for example, the required transparency contradicted their business model.

Central to the economic analysis is the question of defining, from the regulator's viewpoint, the conditions that make a group's holdings reportable. In the following, attention is therefore focused on legislation that seeks to establish the group's circumstances in terms of stock exchange legislation.

1. The Group's Circumstances

The legal circumstances that define a group as being subject to the stock exchange legislation in SESTA, Art. 20 para. 3, are substantiated in Art. 10 of SESTO-FINMA. 10 The regulation states that agents

- Among others: Unaxis, Saurer, Ascom, Sulzer, Implenia.
- In concreto from Art. 13 aBEHV-EBK and Art. 15 BEHV-FINMA, respectively.
- According to current law, deliberate violation of the reporting obligation is penalized with a fine, which, in maximum, amounts to twice the purchase or sales price of the respective share (Art. 41 para. 2 SESTA). The current revision should limit the amount to CHF 10 million (Swiss Federal Council dispatch of August 31, 2011, BBI 2011 6873 ff.), after having proposed CHF 500 000 in the consultation procedure. The revision will enter into force in 2013 at the earliest.
- The stock exchange legislation makes additional demands on listed companies that are already regulated by national corporate legislation. Peter Nobel coined in this context the German expression «Börsengesellschaftsrecht» which emphasizes the interactional interface between these two legal areas that apply to listed companies (first used by Peter Nobel, Schweizerisches Finanzmarktrecht, Bern 1997).

«who coordinate their conduct with third parties by contract or by any other organized methods with a view to the acquisition or sale of equity securities or the exercise of voting rights are held to be acting in concert or as an organized group».¹¹

1.1 Purpose and Organization

A decisive feature of a group's activity is the «coordination of conduct in the event of legal relationships for the acquisition or sale of equity securities or with regard to the exercise of voting rights» (Art. 10 para. 2 lit. a and b, SESTO-FINMA). This concerted action (coordinated conduct) is distinguished from simple parallel behavior, which can arise from real common economic interests. 12 The key aspect here is whether the aligned action is agreed with a view to using common resources and effort (at least implied) (as a common purpose). 13 The coordination requires a minimum of organizational provisions (organizational component) and thus assumes that consciously motivated and intense discussions have taken place between the interested parties. 14

In civil law, a group is often categorized as a simple partnership (Art. 530 ff. Swiss Code of Obligations, CO).¹⁵ However, coordinated conduct does not need to have minimum duration.¹⁶ It also covers the case where several market participants act as a group and form an ad hoc agreement to engage in the market or exercise their voting rights in concert. Ulti-

mately, a characteristic of this behavior is that share-holders' individual decision rights are supplanted by a structuralized group agreement.¹⁷ The individual shareholders therefore subordinate their wills to accomplishing the objectives of the group (organisatio) in pursuing a common purpose (finalitas).¹⁸ The actions performed in securing the agreement have to display these characteristics in order to display a minimum level of intensity.^{19, 20}

According to the Swiss Federal Court ruling on the Quadrant takeover case, concerted action (coordinated conduct) must consist of a «minimum degree of common (inner) purpose (finalitas) and (outward) organization», to satisfy the specifications defining group action.²¹ The same conceptualization was adopted in the Swiss Federal Criminal Court ruling on the Oerlikon case²² and by the Swiss Federal Administrative Court in the case of Sulzer.²³ The Swiss-

- ¹⁷ Christian J. Meier-Schatz, in: Hertig et al. (eds.), Kommentar zum Bundesgesetz über die Börsen und den Effektenhandel, Zürich 2000, Art. 20, no. 229.
- Jakob Höhn, «Acting in concert» im schweizerischen Übernahmerecht: Die Begriffe «Handeln in gemeinsamer Absprache» und «organisierte Gruppe», in: FS Peter Forstmoser, Zürich 2008, 23 ff., 33 f.; Urs Schenker, Schweizerisches Übernahmerecht, Bern 2009, 122.
- 19 Sometimes referred to as «qualified intensity».
- Swiss Federal Criminal Court, Ruling SK.2010.4 of September 21 and of October 20, 2010, E. 3.3.
- ²¹ BGE 130 II 530, E. 6.4.2.
- Swiss Federal Criminal Court, Ruling SK.2010.4 of September 21 and of October 20, 2010, E. 3.3, 4.3. The Federal Criminal Court specifies: «The minimum interior purpose or shared, common objective must be demonstrated to serve as implied evidence, when it is not declared as such; the outward organization must be objectively evident» (E. 4.3). For details on the ruling, see *Georg G. Gotschev*, Die organisierte Gruppe bei der Meldepflicht der Fall OC Oerlikon und seine Folgen, GesKR 2011, 521 ff.
- BVGE 2010/63, E. 9.1. Detailed discussion of the aformentioned ruling: Hoffmann/von der Crone (Fn. 16). Although the two cases Oerlikon and Sulzer do not involve the connected issues, the main parties accused (Ronny Pecik, Georg Stumpf and Victor Vekselberg) were the same in both cases. In the case Oerlikon, the Swiss Federal Criminal Court (Ruling SK.2010.4 of September 21 and of October 20, 2010) rejected the presence of a group and acquitted the three parties. In the Sulzer case, the procedure was terminated in the sense of Art. 53 StGB (Swiss Criminal Code) by the Federal Department of Finance (FDF), after the accused had paid a reparation of CHF 10 million (the FDF's Criminal Law Division closed the investigation in the case of Sulzer with this reparation, as published in the media release of October 18, 2010).
- See Art. 10 para. 1 SESTO-FINMA; also BSK BEHG-Weber (Fn. 3), Art. 20, no. 89.
- 12 Christian Renn, Einsatz und Offenlegung von Derivaten bei Unternehmensübernahmen. Eine Analyse der börsenrechtlichen Meldepflicht aus ökonomisch-rechtlicher Sicht, Zürich 2010, 245 f.
- Vgl. Peter Böckli, Schweizer Aktienrecht, 4. Aufl., Zürich/ Basel/Genf 2009, § 7, no. 70 (already published in the same section of the 3rd edition of 2004); also in BVGE 2010/63, E. 9.1.
- BSK BEHG-Weber (Fn. 3), Art. 20, no. 90. Communication can also be effectuated by a mediator.
- BSK BEHG-Weber (Fn. 3), Art. 20, no. 91; Böckli (Fn. 13), § 7, no. 70. Simple contacts among institutional investors do not indicate coordinated conduct.
- For a derogation from the Swiss Federal Council's dispatch, see BSK BEHG-Weber (Fn. 3), Art. 20, no. 98. Precise specification in the context of a simple, short-term collaborative involvement on a unique agenda item Jan Hendrik Hoffmann/Hans Caspar von der Crone, Das Handeln in gemeinsamer Absprache und die organisierte Gruppe im Offenlegungsrecht, SZW 3/2011, 309 ff., 316.

Supreme Court formulation remains abstract, although the constituent elements of purpose (finalitas) and organization (organisatio), adopted from legal theory, are nevertheless clearly evident.²⁴ Evidence of the constituent feature «organization», specified by the ruling as being expressed by the subordination of individual interests to the group's will,²⁵ cannot depend on the existence of a structured contractual agreement.²⁶ The intention to be legally bound may be expressed by implied behavior; binding legal force is not even a necessary condition for the presence of «concerted action» (coordinated conduct) according to one part of the doctrine.27 A sanctioning mechanism that has a power equivalent to legal binding force should suffice.²⁸ Purpose (finalitas), as the intent to achieve a common goal, must, however, always be additionally evident.

1.2 The Problematics of Proof

A legal sticking point lies in the fact that the subordination of an investor's will to that of the group is an inner fact. Such a fact cannot be proven directly

Peter Böckli, Schweizer Aktienrecht, 3. Aufl., Zürich 2004, § 7, no. 70; Jean Nicolas Druey, Die Meldepflicht, SZW, Sondernummer 1997: Das Bundesgesetz über die Börsen und den Effektenhandel, 36 ff., 42; Peter Nobel, Schweizerisches Finanzmarktrecht, 2. Aufl., Bern 2004, § 11 N 258 ff.; s. dazu im Weiteren die Übersicht in BGE 130 II 530, E. 6.4.1.

The Swiss Federal Administrative Court (BVGer) stated that individual interests have to yield to common interests (BVGE 2010/63, E. 9.1).

This does not necessitate a legally binding contractual agreement, but can depend on other circumstances. Compare: Peter Nobel, Schweizerisches Finanzmarktrecht und internationale Standards, 3. Aufl., Bern 2010, § 10 N 435 ff.; Dieter Zobl, Das Börsenrecht der Schweiz, in: Umbricht (ed.), Das Börsenrecht der Schweiz, Zürich 1998, 7 ff., 53; Höhn (Fn. 18), 35; Schenker (Fn. 18), 122.

Hoffmann/von der Crone (Fn. 16), 316.

Hoffmann/von der Crone (Fn. 16), 317 f. This may also be the case for so-called repeated games. Hoffmann/von der Crone state that a sufficient sanctioning mechanism is given if there is the possibility of a financial damage. Purely social disadvantages should not be sufficient. The distinction is tenuous; it is therefore not inconceivable that, for example, the threat of social disgrace exerts a considerable constricting effect, although it does not produce a financially measurable effect.

where no written agreement exists. Therefore, the adjudicator has to rely on circumstantial evidence.²⁹

Evidence of group activity is identified by circumstances where a potential group member assumes the role of «uncontested manager». The presence of management implies that the behavior of several individuals is targeted at achieving a commonly held objective. This indication of a controlling agent, however, can be considered sufficient evidence of coordinated conduct if the wills of the other group members can be observed to be subordinated to the manager or suppressed economically by some other sanctioning mechanism. Evidence of group subordination and purpose can emerge when shareholders always vote on the same lines over a long period of time without a clear reason. A strong indication of group agency can be identified where voting behavior does not reflect the interests of the shareholders.30

It should be noted with regard to the circumstantial evidence that indicates group structures that the members involved collaborate out of personal interest. Members always only subordinate themselves to the group in order to better pursue their own individual interests.³¹

1.3 Constitutive Circumstances

Art. 10 para. 2 SESTO-FINMA characterizes three constellations of circumstances that are principal, but not exclusive, constituent indications of coordinated conduct or group action:

- Compare BGE 130 II 550 f.; a detailed consideration of the criteria for proof and burden of proof in Ordinance of the FBC (Swiss Federal Banking Commission) of July 13, 2007; Hoffmann/von der Crone (Fn. 16), 39; this is also stipulated by the Swiss Federal Criminal Court in decision SK.2010.4 of September 21 and of October 20, 2010, E. 4. It states that several items of evidence are necessary to constitute satisfactory proof, and that a single piece of evidence is insufficient.
- Hans Caspar von der Crone, Offenlegung von Beteiligungen und Kontrolltransaktionen im neuen Börsengesetz, in: Zobl (ed.), Aktuelle Fragen des Kapitalmarktrechts, SSBR 37, Zürich 1996, 37 ff., 60; BSK BEHG-Weber (Fn. 3), Art. 20, no. 67a f.; Schenker (Fn. 18), 127.
- 31 Schenker (Fn. 18), 123. This distinguishes group action from being identified by the indirect purchase or continued possession of shares. The indirect purchase of holding of shares is not done in the agent's interests, but in the interests of the group whose members instigated the action.

- A «Legal relationships established for the key purpose of purchasing or selling equity securities» (lit. a); e.g., in the form of simple partnerships, so-called *consortia*.
- B «Legal relationships established for the key purpose of exercising voting rights (shareholder groups)» (lit. b); i.e., shareholder pooling agreements.
- C Circumstance where several individuals join together as *«a group holding company* or *group enterprise»* (lit. c).

Even with these three examples of characteristic circumstances listed in the regulation, no further specifications need to be stipulated concerning the form that the cooperative action assumes.³² In cases A and B, the regulation speaks of a «legal relationship»; i.e., a legal relationship must exist between the group members. The relationship may be secured in a written document or may be the result of an oral agreement or manifest itself by implied conduct.³³

The three examples describe circumstances in which the requisite factors «purpose» and «organization» can be assumed. In the case where an actual written syndicate agreement or shareholder pooling agreement exists, the situation should be clear. Where there is no written record, then the principle of trust has to be investigated to establish whether

the decision of the individual group members to surrender their personal decision-making powers to the group was voluntary.

Already in the year 2000, the Disclosure Office of the SWX Swiss Exchange (today SIX Swiss Exchange) published procedural specifications on the disclosure of group-held shareholdings in its Notice (III/00). In this notice, the requirement to report as a «business firm» or «group enterprise» can simply depend on the feasible possibility of exercising control (independent of actual, de facto³⁴ majority voting rights, interlocking personal relationships or statutory or contractual arrangements).³⁵

The presence of coordinated group conduct cannot simply be assumed, as this would then also limit the owners of the company in their corporate governance function. The latter must have the right to announce their intentions publically at annual general meetings or in individual interviews so as to prompt other shareholders to adopt a certain position in order to oppose motions put forward by the board of directors, when necessary. The boundary between a legitimate voting stance and a concerted agreement is breached if shareholders have agreed to adopt a specific voting strategy prior to the annual general meeting or if they have collectively prepared a motion which they then agree to support.³⁶

1.4 Social Liaisons and Business Activities

It is particularly problematical to determine whether social affiliations are personal or professional, where a certain level of familiarity is present

Jin concreto, it is a question of determining what the term «legal relationship» means according to Art. 10 para. 2 SESTO-FINMA.

BGE 130 II 530, E. 6.4.4. The European Union's legislation formulates its regulation more restrictively in Art. 92 lit. of the EU-Securities Guideline (2001/34/EG), in that «coordinated conduct» must exist in the form of a written agreement. The term «shareholder voting commitment agreement» of Art. 10 para. 2 lit. b SESTO-FINMA is also found in and borrowed from the Code of Obligations (OR), Art. 663c. In Art. 663c OR the term is used to indicate that the voting commitment may be based on a written contract or another circumstance. In the latter ruling, it is assumed that «a concerted and long-term exercise of voting rights» is intended (Rolf Watter/Karim Maizar, in: Honsell/Vogt/Watter/Wiegand [eds.], Basler Kommentar OR II, 4. Aufl., Basel 2012, Art. 663c, no. 20). It could therefore be justifiably asserted that, to fulfil the specifications of Art. 10 para. 2 lit. b SESTO-FINMA, the requirement must be qualified with regard to the duration of the consultation agreement. This would then justify making a distinction between the terms «in concerted agreement» (shorter duration of agreement) and «organized group» (longer, qualified duration of agreement), (cf. Fn. 3).

As a consequence of a qualified minority shareholding interest, if the remaining shareholdings are diversely held and there is a de facto qualified majority presence at the annual shareholders' meeting; cf. SIX (formerly SWX), Disclosure Office Notice of November 29, 2000, III/00. For the treatment of disclosures of shareholdings by concerns or corporate groups, see: <www.six-exchange-regulation.com>, (point 2).

SIX, Notice III/00 (Fn. 34), (point 2). Also confirmed by the Swiss Federal Court in BGer 2A.174/2001 of 4 December, 2001, E. 2d; for more details on the reporting obligation for groups owing to a corporate relationship cf. Schenker (Fn. 18), 131 ff. with the note that the corporate relationship could also be interpreted as being an indirect purchase instead of evidence of concerted action.

⁶ Rolf Watter/Corrado Rampini, Proxy Fights, in: Tschäni (ed.), Mergers & Acquisitions III, Zürich 2001, 1 ff., 21; Schenker (Fn. 18), 129.

in the relationship, de natura. There is general consensus that such relationships do not reflect the presence of organized group activity per se, but that each case needs to be assessed individually.³⁷

Analogously, no group exists per se on the basis of a fiduciary relationship. A bank or an asset manager (or a trustee38) may contribute to the identification of group activity if it coordinates the voting behavior or the purchases and sales of multiple shareholders, thereby aligning the individual clients (or financial beneficiaries) as a group.³⁹ This also prompts the question as to whether the banks that are involved in building up and reducing shareholder stakes can also be counted as group participants. In the Saurer case, for example, the relationship between Oerlikon and the participating banks was investigated to establish whether they could be considered as forming a group. 40 The banks rejected the accusation and pleaded that the emission of options and their subsequent sale belonged to their normal professional responsibilities. Although the regulator accepted this to be the case, it was at the same time noted that banks are not, in principle, exempt from being considered potential group members.⁴¹ The demarcation line here appears somewhat tenuous, since financial intermediaries have to be allowed a certain scope if one is not to circumscribe their intermediating role on the stock market. Usual business activities can-

Rudolf Tschäni/Georg Gotschev, Gruppenbildung und Ausnahmegewährung bei der Angebotspflicht – der Fall Quadrant, SZW 2005, 130 ff., 137; Georg Gotschev, Koordiniertes Aktionärsverhalten im Börsenrecht, Diss., Genf 2005, 139; BSK BEHG-Weber (Fn. 3), Art. 20, no. 92; see also Schenker (Fn. 18), 129 f. In distinction to this, a community of heirs is certainly a notifiable group (cf. Annual Report 2000 of the Disclosure Office, SIX Swiss Exchange, point 3.1.3.3).

Cf. on the reporting obligation for trusts: Alexander Greter, Die Melde- und Angebotspflicht bei Beteiligungen im Vermögen eines Trusts, GesKR 2011, 398 ff.

³⁹ See Susan Emmenegger, Creeping Takeovers in Deutschland und in der Schweiz, in: FS Klaus J. Hopt, Berlin 2010, 1763 ff., 1770 f.

In the context of Art. 32 SESTO; i.e., takeover legislation. Here, in comparison to Art. 20 SESTA, evidence of group agency further requires that the group has agreed to subordinate its individual interests to controlling the company (cf. the case of Quadrant, BGE 130 II 530, E. 6).

Ordinance of the Takeover Board on Public Takeover Offers (OTB), Recommendation II, regarding the case of Saurer of October 31, 2006, E. 2.

not substantiate the criteria for purposive behavior in pursuing group objectives (finalitas).

2. Scope of the Group's Duty of Disclosure

A group's duty of disclosure is subject to a specific ruling. The shareholdings of all group's members are considered as a consolidated aggregate; i.e., agreements between individual members concerning the acquisition and sale of share rights are not considered, since these would distort the group image. According to Art. 10 para. 3 of SESTO-FINMA, the group's aggregated (consolidated) shareholdings including the identities of the individual members must be reported.⁴² Yet the individual shareholdings of the group members do not have to be disclosed.43 This holds even if the individual holdings of the group members exceed the threshold percentages stipulated in Art. 20 SESTA.44 The shareholdings of the individual group members therefore remain a «black box» to the other market participants. The literature sometimes refers to this as a «group privilege».45

This «black box» aspect is reinforced in that transactions that cause shares to be shifted around within the group («acquisitions and sales among associates») do not have to be reported (Art. 10 para. 4 SESTO-FINMA).

However, the obligation to report does apply in the case of «changes in the composition of the individuals involved»; i.e., both entries and exits (Art. 10 para. 5 SESTO-FINMA). This duty to report holds irrespective of whether the transactions change the total shareholdings of the group or not. 46 With respect to this, it should also be mentioned that a group also has the possibility to apply to the Disclosure Office of the Exchange for a relaxation or even an exemption from the obligation to notify and publish (Art. 24 SESTO-FINMA), which is granted if it can provide important technical grounds. This may be the case

⁴² Cf. Disclosure Office Notice, SWX Exchange, of March 20, 2000 (I/00), point 1.

⁴³ Cf. Disclosure Office Notice, SWX Exchange, of March 20, 2000 (I/00), point 2.

⁴⁴ Schenker (Fn. 18), 140; von der Crone (Fn. 30), 161.

Susanne Mettier, Offenlegung von Beteiligungen im Börsengesetz, Diss., Zürich 1999, 333; von der Crone (Fn. 30), 161.

⁴⁶ Schenker (Fn. 18), 141.

with large groups that have significant membership changes at short intervals.⁴⁷

Art. 10 para. 5 SESTO-FINMA stipulates that changes in the nature of the group agreement also have to be reported. This refers to the agreement that the group's foundation is based on. Not all changes, however, are notifiable, but only those that regard essential elements.⁴⁸ Cases such as these primarily implicate the constitutive element «organized activity». In the case of shareholder commitment agreements, a change in the contractual voting commitment or the introduction or abolition of pre-emption rights would constitute relevant changes. Purely formal revisions of shareholder commitment agreements without changes in the substantive agreements would be considered immaterial and not subject to the reporting requirement.⁴⁹ It appears questionable whether it is possible to capture significant changes in the power relationships that exist within the group by this means, particularly in view of the group privilege. If the shareholder structure changes because of bona fide shifts in the shareholdings, then these changes can be tentatively dismissed.⁵⁰ The dissolution of an existing group is subject to the reporting requirement, since its shareholdings automatically fall to zero and therefore also below the previously reported threshold values as a result of the dissolution.51 Group members whose shareholdings still reach the relevant threshold values after liquidation

⁴⁷ A conceivable example, here, would be an employee shareholding plan that ties the issue of shares to a purchase retention period and a voting commitment.

⁴⁸ Cf. Schenker (Fn. 18), 143; Jaques Iffland, Groupes et action de concert dans la loi sur les bourses, in: Thévenoz/Bovet (eds.), Journée 2000 de droit bancaire et financier, Zürich 2004, 143 ff., 149 f.; Gotschev (Fn. 37), 176; Rudolf Tschäni, Gruppen im Offenlegungsrecht, in: FS Rolf H. Weber, Bern 2011, 319 ff.

⁴⁹ Schenker (Fn. 18), 143.

50 Schenker (Fn. 18) is of another opinion: By shifting weighty holdings among individual employees, the structure of the group's internal dynamics can actually be changed. This basis, however, rests on a consultation taking place, which should be independent of internal purchase and sales decisions (subject to group privilege rights).

Patrick Schleiffer, Offenlegungs- und Übernahmerechtliche Aspekte bei Kapitalmarkttransaktionen, in: Reuter/ Watter/Werlen (eds.), Kapitalmarkttransaktionen, Zürich 2006, 125 ff., 136. subsequently become individually subject to the reporting requirement.

The SIX Stock Exchange provides a specific form for reporting a business concern or group enterprise. 52 Its purpose is to facilitate accurate and comprehensive reporting, whereby its use is not mandatory.

From a regulatory point of view, particularly in view of the group privilege ruling, one should determine whether the informational content gained from group reporting is potentially less valuable to the market than the information gained from the aggregate of all individual reports. In this context, it would appear worthwhile to carry out an in-depth analysis to determine the price effects of group reporting compared to individual reporting.

III. Previous Studies on the Mandatory Reporting Requirements for Groups

In the screened available literature on financial economics, no theoretical or empirical studies exist that investigate this study's topic for either the Swiss or foreign capital markets. In general, there are no empirical studies that investigate the relevance of group shareholding structures to the Swiss capital market with regard to the duty of disclosure and takeover attempts. In contrast, there is a study on the Italian capital market that analyzes stock price reactions to the publication of voting trusts. For the French capital market, there is a study on shareholder commitment agreements. However, neither of these two studies compares individual and group notifications nor makes inter-group comparisons.

The study on the Italian capital market analyzes the publications of 40 shareholder commitment agreements and 16 group dissolutions in the period

- So-called Form II, Notification in the case of action in concert or as an organized group and in the case of changes in the composition of those involved and the type of understanding or group pursuant to Art. 10 and Art. 21 SESTO-FINMA: see: www.six-exchange-regulation.com
- 53 Gianfranco Gianfrate, What do shareholders' coalitions really want? Evidence from Italian voting trusts, Corporate Governance: An International Review 15/2007, 122 ff.
- François Belot, Shareholder agreements and firm value: Evidence from French listed firms. Working Paper, Université Paris-Dauphine 2010.

from 1998 to 2003. With regard to the publication of a new or a renewed shareholder commitment agreement (on the day of publication or the following day), the results show statistically significant,55 average cumulated negative excess returns of 5,75%.56 On the other hand, in the case of a contract being terminated (a dissolution), the excess returns are significantly positive in the same time frame with 7,75%.57 The author of the latter study concludes that a shareholder commitment agreement of this kind is interpreted as a negative sign by the other shareholders, as company control might shift from the small shareholders to that of the group.58 The study on the French capital market analyses shareholder commitment agreements among large shareholders.⁵⁹ It investigates the publications of 19 new, 25 renewed, and 19 terminated agreements in the period from 2000 to 2008. The results are presented for the time frames [0;+1], [-1;+1] and [-2;+2] relative to the publication date. Compared to the results of the study on the Italian stock exchange, this author gains markedly weaker and insignificant results. In the cumulated time frame from two days before to two days after publication, a significant reaction is evident for the random sample «new or renewed agreements» of -2,32%.60 Belot (2010) explains the insignificant market response to terminations of agreements by the fact that changes of this kind can often be anticipated.⁶¹

The present study investigates how the Swiss equity market values group announcements as compared to announcements made by individual investors, and compares these effects between different types of groups. These investigations use the data of

Based on the decimalization of a set of observations, significance tests seek to establish the degree to which a result is likely to be true or not true. The terms «significance levels» or «degrees of significance» are given as reciprocal values of a percentage value (95%:05%). The significance test calculation is formulated to gain high percentage values (e.g. 95%) to indicate the degree of likelihood that a result value is true, while the lower inverse percentage values (e.g. 5%) indicate the likelihood that the same result occurred by chance and is untrue.

- ⁵⁶ Gianfrate (Fn. 53), 130.
- ⁵⁷ Gianfrate (Fn. 53), 130.
- ⁵⁸ Gianfrate (Fn. 53), 130.
- 59 Belot (Fn. 54), 3. The study by Belot (2010) defines large shareholders as those with at least 10% of the voting rights in the target company per contract party.
- 60 Belot (Fn. 54), 47.
- ⁶¹ Belot (Fn. 54), 29.

all disclosure notifications recorded in the SIX Swiss Exchange databank during the period from January 1, 2008 to December 31, 2010. The empirical investigation aims to determine whether the institution of shareholder groups reflects a market valuation that is commensurate with the attention it has received from a regulatory standpoint.

From an economic point of view, there are legitimate arguments that support reporting legislation for individual and group investors.62 Based on the objectives of the SESTA, the arguments have to be based on a wish to improve the functioning of capital markets (mechanism's and system's protection) or to enhance the protection of investors (individual's protection). In the case of the protection of investors, reporting duties serve to reduce the illegitimate exploitation of informational advantages, since shareholder structure, as evidenced in the wealth of Corporate Governance literature, is one of the most central determinants of firm value, and is thus also relevant to share value. 63 Moreover, information about changes in shareholder structure is extremely important, when communicated, as it may be interpreted to indicate the likelihood of future takeover bids. The duty of disclosure therefore serves as a precondition for en-

- For a comprehensive overview, see Rolf Watter, Rechtliche Konsequenzen bei Verletzung der börsenrechtlichen Meldepflichten gemäss Art. 20 und 31 BEHG mit Schwerpunkt auf den verwaltungsrechtlichen Folgen nach Art. 41 BEHG; and Rolf Watter; Finanzmarkt ausser Kontrolle? Selbstregulierung – Aufsichtsrecht – Strafrecht (publ. J.-B. Ackermann und W. Wohlers.), 3. Zürcher Tagung zum Wirtschaftsstrafrecht, Zürich/Basel/Genf 2009, 166; Peter Böckli/Christoph B. Bühler, Börsenrechtliche Meldepflicht nach einer Punktlandung: Was heisst «Erreichen, Unter- oder Überschreiten» der Grenzwerte?, in: FS Rolf H. Weber, Bern 2011, 247 ff.; Roman Inderst presents a financial and information economics analysis on reporting obligations, «Meldepflichten». The Financial Economics Perspective. Lecture text for the IMFS Symposium: Gesetzgeberische Massnahmen zur Verhinderung der Übernahme börsennotierter Unternehmen im Wege des «Anschleichens», available as a White Paper from the House of Finance of the Goethe Universität Frankfurt a.M., (2009). The main focus of the paper by Inderst is on an analysis of the tradeoff between economic welfare (efficiency) and shareholder interests.
- 63 Cf. among others, Adolf Augustus Berle/Gardiner Coit Means, The modern corporation and private property, 2nd ed., New York 1933, or Michael C. Jensen/William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, Journal of Financial Economics 3/1976, 305 ff.

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suring that shareholders face equal treatment.⁶⁴ There is, however, a tradeoff: although more restrictive reporting duties increase transparency and reduce the likelihood that individual investors or groups are able to gain controlling interests in a company relatively inconspicuously; nevertheless, they incur costs in terms of the efficiency of the market for corporate control, which, though difficult to quantify, are very real. Increased transparency also has a systematic aspect: mandatory rules on the reporting of information that impacts share prices make assessing the fairness of stock market activity more transparent, and thus reinforce trust in the functioning and integrity of the financial system.

It is directly apparent that these safeguarding requirements should be extended to apply to the activities of groups. Legislation has already achieved this by identifying the function and mechanism of group agency in «coordinated conduct». However, to ensure that the legislation dealing with group agency can be effectively implemented in practice, the circumstances defining it have to be satisfactorily described and recorded.65 If this can not be achieved, the definition stays too diffuse, and the investor will have to accept that «everything» can be interpreted as being a group; such a watering-down of the concept of a group has a impoverishing effect on the jurisdictional meaning of a «bona fide» group and is unable to satisfy claims of legal certainty.66

Equality is a relative concept. This can be seen in the current revision of the SESTA in connection with the duty to provide a public purchase offer, where the control premium has to be abolished, which also applies the principle of equal treatment.

IV. Data Collection and Random Sample

1. Data Collection

The empirical study is based on the data provided by the SIX Swiss Exchange's database on «significant shareholders» via the Internet. 67 This data source contains publications on securities transactions that are reportable according to Art. 20 SESTA. The declaration «significant shareholders» in this context refers to investors that fulfill their reporting obligations according to SESTA and the Swiss Financial Market Supervisory Authority: «Whosoever directly, indirectly or in concert with third parties acquires or sells for their own account shares or purchase or sale rights relating to shares in a company incorporated in Switzerland whose equity securities are listed in whole or in part in Switzerland and thereby attains, falls below or exceeds the threshold percentages of 3, 5, 10, 15, 20, 25, $33\frac{1}{3}$, 50 or $66\frac{2}{3}$ of voting rights, whether or not such rights may be exercised, must notify the company and the stock exchanges on which the equity securities in question are listed.» 68

In a first step, reported data that are relevant to our investigation are selected from the SIX Swiss Exchange databank. Here, only the notifications that regard a natural person or a group of independent⁶⁹ individual investors are used. Voting rights that have the following characteristics are not used in the investigation:

See Section II above.

From an economic perspective, the important statement in the original text says (translated from German): «Thirdly, unneccessary notifications about existing groups dissipate the high degree of informational value that the other notifications offer. Ultimately, they serve to veil the actual shareholding structure of the target company. This hinders the transparency desired in this area», see Tschäni/ Gotschev (Fn. 37), 139.

The data bank used and a detailed description of it can be accessed on the Internet page via the SIX Swiss Ex-Weblink http://www.six-swiss-exchange.com/ news/major_shareholders_de.html>. The methodology applied in the empirical section of this paper and the data collection on notifiable securities transactions corresponds to a paper, here adapted to the Swiss market by Peter Weber/Heinz Zimmermann, Hedge fund activism and information disclosure: the case of Germany, forthcoming in European Financial Management.

Art. 20 SESTA on the reporting obligation.

We categorize groups of investors as «independent» as long as no other direct dependencies can be found to exist in the group in terms of mutual property rights, as is the case, for example, with a holding company and its subsidiaries, or in the case of a company and a natural person (single individual), where the individual simultaneously owns a significant percentage shareholding in the investing company.

- Notifications reported by individuals who are simultaneously founders and employees of the respective company;⁷⁰
- Notifications that purely relate to banks, insurance institutions, mutual funds, hedge funds, private equity funds or public institutions⁷¹ in exercising an investor's or the target company's role. Investors of this kind, however, are only included where they act in concert as a group with the investors investigated in this study;
- Notifications that arise from capital increases or the distribution of dividends in kind, in the form of shares;
- Notifications that relate to a limitation of the voting rights that can be registered for the respective company per shareholder;⁷²
- Group notifications indicating a lock-up group;
- Transactions within a concern; for example, the transfer of shareholdings from a holding company to a subsidiary company.

In cases where several notifications about the target company were registered on the same day, these are then combined into a single observation, as long as they all regard the same category of investors and have the same transaction objectives. Notifications that have different investor categories or different transaction objectives are not used.

In a following step, after the filter criteria have been applied, the retained notifications are individually analyzed and each assigned to one of the two main categories, «Single individuals» and «Groups»:

«Single individuals»

This main category contains disclosure notifications from individuals, who, for their own account, directly, or indirectly (via the company which they control), report that the notifiable threshold of the

An example of this is the notification of June 30, 2008 regarding a 6,06% holding owned by Klaus Kappeler in Goldbach Media AG (today Goldbach Group AG). Klaus Kappeler simultaneously held positions as CEO in Goldbach Group AG and Goldbach Media AG. This notification would therefore not be included in the data bank.

Examples here are state funds or state investments, such as the investments of the Swiss Confederation in UBS AG in December 2008.

See, for example, Flughafen Zürich AG with registration restrictions of 5% of the voting rights per shareholder. voting rights of a company listed on the Swiss stock exchange has been reached. In this category, the type of notifications included are those which regard the relationship of two individuals recorded as being in a marital or registered civil partnership. Equally, notifications submitted jointly by minors and their notarized parental guardians are considered as the report of a single individual. The disclosure notifications of foundations, whose activities are controlled by a single individual, are assigned to the category «Single individuals».

• «Groups»

This main category encompasses disclosure notifications that are submitted by several investors as a group. The grounds warranting a joint notification may be that the notifiable threshold of the group's collective voting rights of a company listed on the Swiss stock exchange have been reached, the establishment of the group itself, or a change within the group. Groups can consist of single individuals, banks, insurance institutions, mutual funds, private equity funds or public institutions. In order to highlight the relevance of the various investor groups, we subdivide the main category «Groups» into two subcategories: «Groups of individual investors» and «Groups of family-member investors».

«Groups of individual investors»

This subcategory consists of disclosure notifications by individuals who jointly report that the notifiable threshold of the group's collective voting-right holdings of a company listed on the Swiss stock exchange has been reached. Here, groups consisting of individuals who are connected through kindred or marital ties are not included.

• «Groups of family-member investors»

This subcategory consists of groups that are composed of individuals who are related or who have blood ties. Exceptions to this case are the notifications relating to two individuals in a marital or registered civil partnership and their underage children. Disclosure notifications of this kind are not assigned to the category «Groups of family-member investors», but to that of «Single individuals».

The information necessary for this selection is gained, as far as possible, from the annual reports and the Internet presences of the respective compa-

nies or from additional media research. Where it was not possible to decide on which investor category to assign the investor or target company to, the respective notification was not used.

The share price data needed for the analysis were taken from the data provider Thomson-Reuters Datastream. Here, it must be mentioned that for several shares no historical price data are available, according to the Thomson-Reuters Datastream. The notifications of these companies therefore had to be excluded from the subsequent evaluation.

2. Characteristics of the Random Sample

In total, 3,617 disclosure notifications, gathered from the SIX Swiss-Exchange Databank and spanning the period from January 1, 2008 to December 31, 2010, were evaluated. After applying the filter mechanism mentioned in the previous section, 218 notifications were relevant to the subsequent analysis. These 218 retained notifications could be assigned to 61 single individuals and 32 groups of investors, relating to a total of 60 and 35 different companies, respectively.

The investigation period spanned from January 1, 2008 to December 31, 2010. It should be noted that the SIX Swiss Exchange Databank relies on the published data of the Swiss Official Gazette of Commerce (SOGC) for the data published prior to 2009. Here, it is possible that the SOGC notifications were only published a few days subsequent to the publications via electronic media. In such cases, one has to assume that the market participants were informed prior to the publication date adopted by the study. In order not to further limit the random sample and increase the explanatory relevance, the notifications before 2009 were included in the investigation.

In order to take account of the impreciseness of the actual time of publication, in addition to investigating the price responses to the publication date, price responses in various time frames around the publication date were also studied (for the different time frames, see Section 3, «Methodological Procedure»). Moreover, individual results are presented for the period *before* and the period *after* the direct electronic publication.

The decision to set the commencement date for the data at the beginning of 2008 has the advantage that substantial changes in SESTA and SESTO-FINMA, which are extremely relevant to the present study, came into force on December 1, 2007. Here, the key events were the decision to amend the reporting obligation according to Art. 20 SESTA of June 22, 2007 and the respective partial revision of the Stock Exchange Ordinance of the Swiss Federal Banking Commission (SESTO-Swiss FBC) of July 1, 2007 and October 2, 2007. This had the consequence that an initial lower reporting threshold (3% from previously 5%74) and additional higher thresholds (15% and 25%) were introduced. By doing this, it was then possible to survey notification records for lower percentage thresholds as well as additional notification thresholds, compared with the previous version of Art. 20 SESTA.

Furthermore, the reporting obligation was expressly extended to cover purchase and sales rights and additional financial instruments of listed shares on the Swiss stock exchange. This improved the data collection in so far as all indirect purchases and sales could be captured more completely, where possible. Moreover, greater penalties were introduced for breaches of the reporting obligation. This aimed to establish a more disciplined reporting ethos and thus a more accurate database.⁷⁵

- The publication date is that given by SIX Swiss Exchange. The data bank available at <http://www.six-swiss-exchange.com/news/major_shareholders_de.html> is described as follows: «The data bank consists of notifications published by companies in the Swiss Official Gazette of Commerce (SOGC) from January 1, 1998 until the end of 2008, and that were subsequently recorded by the Disclosure Office in the data bank. When the electronic publication platform of the Reporting Office was implemented, the data were recorded directly by the issuing companies within two days of the report's arrival. The notification is published on the SIX Swiss Exchange website before 7:30 on the following day.»
- Investors, who had to report their shareholdings owing to the new 3% threshold, were allowed an extension to the reporting deadline until February 29, 2008. For more on this, and an in-depth presentation of these changes in SESTA and in SESTO-FINMA, see: Eva Bilek/Hans Caspar von der Crone/Matthias Hirschle, Neuerungen im Offenlegungsrecht, SZW 2008, 1 ff., as well as the commentary of the Federal Banking Commission on Articles 9 to 23, SESTO-FBC and the transitional legislative provisions, Bern, November 24, 2007, 9.
- 75 The empirical results show that a large portion of the infringements of the reporting obligation were in the form of tardy or neglected notifications on the German stock mar-

In order to investigate the background of the duty of disclosure in more detail, we first establish two main categories of groups: «Single individuals» and «Groups». «Groups» are then broken down into subcategories. The group of «Single individuals» and the subgroups of «Groups» are then subsequently assigned to categories of specific transactions which they conduct in the context of the reporting obligation. We first identify two categories of transaction components that apply to the main category «Groups» as follows:

- «Purchases, shareholder commitment agreements (SCA), and changes in contract and group structure (Changes in CGS)» consists of disclosure notifications of transactions that arise from: the purchase of shares, voting and purchase rights, and the respective sale rights; a shareholder commitment agreement between the group's members; or changes that have occurred in the group's contractual arrangements or in its structure.
- «Sales and group dissolutions» consists of disclosure notifications of transactions that arise from: the sale of shares; the sale of voting and purchase rights or the purchase of sales rights; or the group's dissolution.

The second main category «Single individuals» was subdivided into the following three categories of transaction components:

- "Rurchases" consists of disclosure notifications of transactions that involve the purchase of shares; the purchase of voting or purchase rights, as well as the respective sale of sales rights.
- "Sales" consists of disclosure notifications of transactions that involve the sale of shares; the sale of voting or purchase rights, as well as the respective purchase of sales rights.
- 3. «Entry into force of the SESTA revision» consists of disclosure notifications of transactions that arose as a result of the revised SESTA framework, which introduced the obligation to report for the additional minimum threshold of a 3% ownership of a company's voting rights. This obligation therefore applies to voting rights that the report-

ket. A possible explanation for this might be that a failure to report correctly occurs rarely and, when it occurs, is only penalized with a modest fine: *Weber/Zimmermann* (Fn. 67), 31.

ing agent already possessed prior to commencement of the ordinance's additional threshold.

V. Methodological Procedure

In order to investigate the relevance of the reporting obligation to share price, we conduct a standard event study.76 This method assumes an efficient capital market, which in turn assumes that shares reflect all price-relevant information in their prices. Applied to the present investigation, this means that pricerelevant information associated with the publication of reportable voting rights should be incorporated in the respective share's price immediately after the announcement. For this reason, a short time window of a maximum of five days prior to and one day after publication is chosen for the following investigation. In order to make the statements more robust, the study presents the results for five different time windows covering the following periods spanning: (1) five days prior to and one day after publication date [-5; +1]; (2) one day prior to and including the publication date [-1; 0]; (3) the publication date itself [0]; (4) one day prior to and one day after publication [-1; +1]; and (5) the publication date up until and including five days after it [0, +5].

In the event study, the daily relative price changes (returns), adjusted for market performance, are averaged across all shares. The adjustment for market performance is made in order to isolate the price effect on the share-specific price component. The simplest method is to subtract the market return from aggregate share returns (the relative change in a market index). A more precise method, which also takes account of the varying systematic risk (the so-called market Beta) of the individual securities, consists in estimating a linear regression equation for each individual security. The share-specific elements of returns (Re)⁷⁷ are reflected in the forecast errors of this regression equation. Details on the procedure

As also suggested by John Y. Campbell/Andrew W. Lo/A. Craig MacKinlay, The Econometrics of Financial Markets, New Jersey: Princeton University Press, 1997 and by A. Craig Mackinlay, Event Studies in Economics and Finance, Journal of Economic Literature 35/1997, 13 ff.

These share-specific return components, adjusted for the influence of the market, are also termed «abnormal» returns or «excess returns».

used in this method can be found in *Cambell*, *Lo* and *MacKinlay* (1997).

The Swiss Performance Index (SPI) is used for the market return, which is optimally suited to the present investigation, due to the fact that almost all companies listed on the Swiss capital market are represented in this index. In order to ensure that the time of the notification does not influence the parameter estimates, αi and βi are estimated for a period prior to the event time window – extending from 100 to 11 days prior to the event.

In addition to the arithmetic average, the median of the excess returns is shown, which provides a more robust average, which is less sensitive to individual extreme price reactions. In order to ascertain the validity of the results, the results were subjected to a significance test. This was conducted on the mean values using a standard t-test and on the medians with a Wilcoxon rank-sum test.78 Since we can only draw a sample from the complete population, we need statistical methods to assess whether a number is different from zero after accounting for the variation in the sample. The term «statistical significance» then refers to the observation that the statistical method used suggests that the analyzed number is actually different from zero, at least at some pre-specified level of confidence.

VI. Empirical Results

The empirical results of this investigation are displayed in Tables 1–3. These three tables are distinct from one another with regard to the time frames analyzed and the sizes of their random samples. This is due to the fact that two different publication processes existed during the whole of the investigation period from January 1, 2008 to December 31, 2010. As explained in detail earlier in Section 2.2, it is possible, with respect to the disclosure notifications relating to 2008, that the SOGC-publication only appeared after the electronic media publication, and that, therefore, the market participants were informed prior to the publication date used. This can

have the effect that a price effect⁷⁹ may already be present prior to the SOGC publication. Such a case would lead to the false interpretation that the publication was not relevant to the market, even though it actually was. In order to avoid misinterpretations of this kind and to indicate the impact that the practice of electronic publishing had when introduced at the beginning of 2009, the study investigates, not only share price reactions on the SOGC publication date (day [0]), but also share price reactions within two further time frames: from five days to one day prior to publication date [-5; -1]; and one day prior to and one day after [-1; +1]. In a second investigation, the random sample is subdivided into a period prior to and a period after the introduction of direct electronic publication (Tables 2 and 3).

1. Results for the Entire Period (2008-2010)

In Table 1, results are given for the entire period of the investigation (January 1, 2008 – December 31, 2010). Here, it can be seen that group disclosure notifications in the transaction category «Purchases, shareholder commitment agreements and changes in shareholder structure» do not trigger statistically significant⁸⁰ price reactions on the day of publication. However, for the transaction category «Sales and group dissolutions», group notifications do trigger price reactions, where statistically significant effects are triggered specifically by the subcomponent «Group dissolutions». Even if no statistically significant results can be found for the transaction category «Purchases, shareholder commitment agreements and changes in contract and group structure» (55 notifications), as well as with the transaction subcomponents «Purchases» and «Shareholder commitment agreements», a statistically significant reaction can be observed for the transaction subcomponent «Changes in contract and group structure», with only nine notifications.

Also, within the «Groups» subsamples, «Family groups» and «Groups of individual investors», no

⁷⁸ Cf. Frank Wilcoxon, Individual Comparisons by Ranking Methods, Biometrics Bulletin 1/1945, 80 ff.: These test statistics are not displayed in the tables.

The terms «price effect» and «price reaction» refer to size of the cumulated excess returns, as defined above.

The meaning of «significance» is used statistically below; whereby a confidence level of 90% is weakly significant, one of 95% is significant, and one of 99% is strongly significant.

clear picture emerges either. There is a significant positive price reaction in response to notifications relating to «Shareholder commitment agreements» established by family groups (10 out of 30 notifications); the same is true for the transaction subcomponent «Group dissolutions» of the subcategory «Groups of individual investors» (renewed agreements) (12 out of 16 notifications). Weakly significant price effects can also be occasionally identified on the days before publication, particularly in the case of transaction subcomponent «Sales».

This unclear picture also emerges with regard to the disclosure notifications for «Single individuals». No significant price reaction on the day of notification can be identified for either the 108 «Purchases» or for the 26 «Sales»; whereby, a significant reaction can only be spotted for the transaction subcomponent «Purchases» in the run up to the period of investigation. Equally, there is a weakly significant, negative reaction for the nine observations of the transaction subcomponent «Entry into force of the SESTA revision» for the pre-publication time frame [–5;-1]. This is also the case for the extended time frame spanning one day prior to and one day after publication [–1;+1].

The absence of clear tendencies in the overall picture, as well as the fact that some significant results could be identified already prior to the publication date, may indicate that in 2008 information was published prior to the SOGC publication date in some cases. Further analysis is therefore necessary for the period prior to and after the introduction of direct electronic publication. However, the disadvantage here is that individual subsamples provide fewer observations and, therefore, have less explanatory power.

2. The Effect of the New Publishing Practice (2009)

Tables 2 and 3 contain the results for the two subperiods 2008 and 2009–2010; i.e., the periods before and after the introduction of the SIX Swiss Exchange web-based electronic publication platform at the beginning of 2009.

Table 2 shows that most of the significant price reactions to disclosure notifications observed *before* the introduction of the new practice of electronic publication do actually occur before the SOGC publication date (day [0]). With regard to the main category

«Groups», the transaction subcomponent «Sales» shows a significant, negative result for the time frame [--5;-1]. Similarly, it shows a weaker reaction for the period [-1;+1], however not on the publication date itself. For the notifications relating to transaction subcomponent «Changes in shareholder commitment agreements» significant positive price reactions are also observed for the time windows [-5;-1] and [-1;+1]. This result, however, is based on only four observations. For the transaction category «Sales and group dissolutions», significant, negative, and in this case very strong, price reactions are observed for the time window [-5;-1].

For the main category «Single individuals», the most significant results are found in the time window [-1;+1]. Here, a significant, positive reaction is identified in the case of 49 purchases notifications and a weakly significant, negative reaction for notifications arising from the SESTA revision. For the other transaction categories relating to «Single individuals», significant median values occur only occasionally, while the average values are non-significant.

The picture changes, however, when only the notifications that occur after the introduction of the new practice of electronic publication are considered (Table 3). With regard to main category «Groups», the transaction category «Purchases, shareholder commitment agreements, and changes in contract and group structure» shows a statistically significant, positive price reaction on the publication day with 31 observations. If one looks at the individual components of this transaction category, the latter result is then seen to be triggered by the positive price reactions attributable to the transaction subcomponent «Shareholder commitment agreements» (weakly significant) and also by «Changes in the composition of the group structure» (significant) on the publication date. Moreover, the transaction category «Purchases and group dissolutions» shows a statistically significant, negative price reaction with 11 observations, also on the publication date. This result is primarily attributable to the significant, negative price reactions triggered by the transaction subcomponent «group dissolutions».

When considering the disclosure notifications for the main category «Single individuals», the price reactions are decidedly less pronounced. Only a negative price reaction can be identified for notifications relating to the transaction subcomponent «Sales» (the average being weakly significant; the median, significant).

It should be mentioned that the random samples for the individual time periods (2008 and 2009–2010) are not very comprehensive; and that the narrower the subgroup is, the more pronounced is its effect. Nevertheless, for the period 2009–2010, significant price reactions were identified on the publication day in response to different transaction components (shareholder commitment agreements, changes in contract and group structure, and group dissolutions).

In this context, it is particularly interesting to note that for group notifications *since* 2009, *shortly before* publication, practically no significant price effects can be observed. This might indicate that the information on the market in the recent past either gained greater value or that, due to the change in publishing practice, the information content (novelty) could be queried more accurately.

If one considers the results prior to the introduction of the direct electronic publication (Table 2), then the pre-publication price reactions support the second explanation.

VII. Conclusions

In the present study, the disclosure effects of 3,617 notifications recorded in the SIX Swiss Exchange databank regarding «significant shareholders» in the Swiss equity market were analyzed for the time period from January 1, 2008 to December 31, 2010. As a result of the selection procedure applied and described in this paper, 218 notifications could be used for the empirical investigation. These notifications were submitted by 61 single individuals and 32 groups.

The aim of this study was to test the validity of the hypothesis that the disclosure notifications of major shareholders have a significant impact on equity pricing. With this objective, we specifically wanted to discover whether the market information attributed to group notifications was as valuable as that attributed to the reports of individual investors.

The results confirm the effects of group disclosures to be both statistically significant and financially important, where the explanatory relevance of the results are seen to increase significantly in conjunction with the introduction of the direct electronic publication platform of the SIX Swiss Exchange in January 2009. It can be seen that in the time period prior to SIX Swiss Exchange electronic publication the price reactions are distributed over several days prior to the actual SOGC publication and can therefore only be identified as imprecise or skewed values. On the other hand, one sees that with the prevailing, more accurate and direct publication practice, that the price effects before the SOGC publication date disappear and emerge almost in concentration on the publication date.

The fact that the publication effects could only be identified in isolation with the introduction of direct electronic publication means that the sample's explanatory relevance was substantially curtailed. Nevertheless, this limited sample does present a significant difference in the frequency of significant price effects between the two categories of investor notifications: groups and single individuals. A further observation shows that the price reactions within the transaction subcategories «Purchase» and «Sales notifications» are heterogeneous. The effects of purchase notifications are not characterized by typical «Purchases», but instead by changes in «Shareholder commitment agreements» and in «Contract and group structure», while for «Sales», «Group dissolution» is identified as a price-relevant transaction.

To sum up, the study has been able to establish that the group disclosure notifications in the sample that was investigated possess price-sensitive information for the Swiss capital market to a greater degree than the notifications of single individuals, and that they are statistically significant in contrast to the latter. Moreover, the study established that the practice of direct electronic publication, established since the beginning of 2009, has simplified the notification procedure for market participants, enabling them to submit and access information more immediately, which consequently affects share pricing on the stock market.

Table 1: Price effects for the time period from 2008 to 2010

Table 1 presents the average excess returns, the median excess returns, the average cumulative excess returns and the cumulative median excess returns for the whole sample from January 1, 2008 to December 31, 2010 relative to the publication date (day 0). N denotes the respective number of observations; the test statistics are not shown in the tables. The aster-

isks */**/*** denote the levels of statistical significance 10%, 5%, 1%. Significance tests were conducted to gain the average excess returns using the student's t-test and the *Wilcoxon* rank-sum test. The results from the samples with less than four observations are not shown due to their lack of explanatory power.

		/	Time period	Z	[-5;	[-5;-1]		[0]	[-1;	[-1;+1]
O	Category				Average (cumulative)	Median (cumulative)	Average	Median	Average (cumulative)	Median (cumulative)
3	_	Groups (aggregate)	gate)							
	1.1	Purcha	Purchases, SCA, Changes CGS ³¹	55	-0.46%	-0.24%*	0.29%	0.17%	-0.13%	%89.0-
		1.1.1	Purchases	17	-1.70%*	-0.59%*	-0.33%	-0.22%	-0.62%	-1.05%
		1.1.2	SCA	29	-0.28%	-1.55%*	0.48%	0.13%	-0.03%	~89.0-
		1.1.3	Changes CGS	6	1.31%*	1.24%**	0.85%**	0.78%**	0.49%	0.62%
	1.2	Sales,	Sales, Group dissolutions	18	-1.15%	-2.03%**	-0.57%**	-0.23%*	-0.22%	-0.56%
		1.2.1	Sales	5	-3.63%*	-3.95%*	-0.40%	0.05%	-1.38%	-1.27%
		1.2.2	Group dissolutions	13	-0.72%	-0.77%	-0.64%**	-0.74%*	0.22%	-0.22%
2.		Family groups								
	2.1	Purcha	Purchases, SCA, Changes CGS	30	-0.79%	-0.19%	0.19%	-0.11%	-0.11%	-0.48%
		2.1.1	Purchases	14	-1.66%*	-0.37%*	-0.64%	-0.49%	-0.63%	-1.20%
		2.1.2	SCA	10	-0.79%	-1.13%	**%96:0	*%68.0	0.28%	0.78%
		2.1.3	Changes CGS	9	1.23%	0.50%	0.85%	0.80%	0.45%	%80.0
	2.2	Sales,	Sales, Group dissolutions	2						
		2.2.1	Sales	1						
		2.2.2	Group dissolutions							

81 SCA (shareholder commitment agreements); Changes CGS (changes in contract and group structure),

Continuation of Table 1: Price effects for the time period from 2008 to 2010

		/	Time period	Z	(-5)	[-5; -1]		[0]	H	[-1;+1]
రి	Category				Average (cumulative)	Median (cumulative)	Average	Median	Average (cumulative)	Median (cumulative)
ಣೆ	-	ibui jo sc	Groups of individual investors							
	3.1	Purcha	Purchases, SCA, Changes CGS82	25	~90.0-	-1.32%	0.41%	%69.0	-0.15%	%89.0-
		3.1.1	Purchases	m						
		3.1.2	SCA	19	~10.0-	-1.55%	0.22%	-0.01%	-0.20%	-0.74%
		3.1.3	Changes CGS	3						
	3.2	Sales,	Sales, Group dissolutions	16	-1.31%	-1.39%	**%89.0-	-0.38%**	-0.40%	-1.07%
		3.2.1	Sales	4	-3.55%	-4.41%	-0.38%	0.37%	-1.89%	-2.80%
		3.2.2	Group dissolutions	12	-0.56%	-0.22%	-0.78%***	-0.74%**	0.10%	-0.56%
4.	-	Single individuals	ıals					H		
	4.1	Purchases	ses	108	1.20%*	0.84%**	-0.11%	0.05%	~80.0-	-0.30%
	4.2	Sales		26	%08'0	-0.27%	%00.0	-0.29%	0.18%	-0.84%
	4.3	Entry i Inkraff	Entry into force of SESTA revision Inkrafttreten rev. BEHV	6	-1.01%	-0.41%*	-1.06%	-0.77%	-1.23%*	-1.09%*

82 SCA (shareholder commitment agreements); CGS (changes in contract and group structure).

Table 2: Price effects for the year 2008 (SOGC-publications)

Table 2 presents the average excess returns, the median excess returns, the average cumulative excess returns and the cumulative median excess returns for the data subsample from January 1, 2008 to December 31, 2008 relative to the publication date (day 0). N denotes the respective number of observations; the asterisks */**/*** denote the

levels of statistical significance 10%, 5%, 1%. Significance tests were conducted to gain the average excess returns using the student's t-test and the *Wilcoxon* rank-sum test. The results from the samples with less than four observations are not shown due to their lack of explanatory power.

		1	Time period	Z	[-5]	[-5; -1]	Thought.	[0]	[-1;	[-1; +1]
Ü	Category				Average (cumulative)	Median (cumulative)	Average	Median	Average (cumulative)	Median (cumulative)
	1. Groups (aggregate)	is (aggre	gate)							
	1.1	Purch	Purchases, SCA, Changes CGS83	24	-0.79%	-0.19%	-0.54%	-0.22%	-0.74%	-0.70%
		1.1.1	1.1.1 Purchases	12	-2.61%**	-2.43%**	-1.04%	-0.45%	-1.63%*	-1.37%**
		1.1.2	SCA	∞	0.91%	0.11%	-0.54%	-0.56%	-0.41%	-1.51%
		1.1.3	Changes CGS	4	1.27%**	1.55%*	%96:0	0.72%	1.27%**	**%08.0
	1.2	Sales,	Sales, Group dissolutions	7	-3.74%**	-3.95%**	-0.05%	0.02%	-1.59%	%06.0-
		1.2.1	Sales	3						
		1.2.2	Group dissolutions	4	-1.98%	-0.68%	-0.38%	-0.46%	-2.52%	-1.99%
		3								
4.		Single individuals	uals							
	4.1	Purchases	ases	49	1.16%	1.23%**	0.34%	0.27%	1.35%**	0.45%*
	4.2	Sales		12	0.51%	-0.33%	-0.56%	-1.11%**	-0.77%	-1.27*
	4.3	Entry	Entry into force of SESTA revision	6	-1.01%	-0.41%*	-1.06%	-0.77%	-1.23%*	-1.09%*

83 SCA (shareholder commitment agreements); CGS (changes in contract and group structure).

Table 3: Price effects for the time period 2009-2010 (direct electronic publication)

Table 3 presents the average excess returns, the median excess returns, the average cumulative excess returns and the cumulative median excess returns for the data subsample from January 1, 2009 to December 31, 2010 relative to the publication date (day 0). N denotes the respective number of observations; the asterisks */**/*** denote the

levels of statistical significance 10%, 5%, 1%. Significance tests were conducted to gain the average excess returns using the student's t-test and the Wilcoxon rank-sum test. The results from the samples with less than four observations are not shown due to their lack of explanatory power.

		1	Time period	Z	[-5;	[-5; -1]	100000	[0]	[-]	[-1; +1]
Ü	Category				Average (cumulative)	Median (cumulative)	Average	Median	Average Median (cumulative)	Median (cumulative)
-	Group	Groups (aggregate)	gate)							
	1.1	Purcha	Purchases, SCA, Changes CGS84	31	-0.20%	-0.59%	0.93%**	0.83%**	0.34%	%89.0-
		1.1.1	Purchases	5	0.49%	0.10%	1.38%	0.82%	1.79%	-0.91%
		1.1.2	SCA	21	-0.73%	-1.79%**	*%/28	*56.0	0.11%	0.27%
		1.1.3	Changes CGS	5	1.34%	0.51%	0.77%**	0.82%**	-0.12%	-0.82%
	1.2	Sales,	Sales, Group dissolutions	11	-0.12%	-0.77%	**%06.0-	-0.74%**	0.65%	-0.22%
		1.2.1	Sales	2						
		1.2.2	Group dissolutions	6	-0.16%	-0.77%	-0.76%**	-0.74%**	1.44%	-0.10%
4	-	Single individuals	ials							
	4.1	Purchases	Ises	59	1.24%	0.14%	-0.48%	-0.01%	-1.28%*	**%68:0-
	4.2	Sales		14	1.04%	0.28%	0.48%	0.11%	%66.0	-0.08%
	4.3	Entry i	Entry into force of SESTA revision	0						

SCA (shareholder commitment agreements); CGS (changes in contract and group structure).

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