Intervention markets and Market Re-organization

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Abstract
Organizations and markets are more similar than institutionalized ideas have us believe. A generic similarity is that they are both organized forms of co-ordination in society, and as such often subject to re-organization. However, conversely to formal organizations, the topic of why and how markets are re-organized has generally been neglected by organizational scholars. In this article, we 1) adopt an open system perspective on market re-organization, and 2) specifically analyze how other markets drive re-organization of the individual market.

Empirically, the article demonstrates how new or existing markets come into close relation to other markets as a response to their perceived failures or other problems. We refer to the prior type of market as ‘intervention markets’, i.e. markets that intervene in the function of other markets. The individual markets studied – a financial market in our first case and, foremost, power production markets in our second case – were all re-organized as a way to manage the pressure of intervention markets. However, the intentions behind the re-organizations differed: exclusion of the intervention-market (an advisory market) in the first study, and adaptation to it (the EU market for emission allowances) in the latter.

Introduction – market change
The general idea of how organizations change is significantly different from that of how markets change. Change of organizations is generally perceived as a managerial activity. Managers reform organizations: they change their structures, ideologies and working methods to improve their results. Further, reform is generally seen as a frequent part of managing organizations. Recurrent reform represents a self-evident managerial response to dynamic environments and demands for progress (Sturdy & Grey 2003). The general belief
of organizations as subjects to recurrent reforms is also well reflected in practice. Scholars of organizational change describe reform in organizations as ‘common’ (Alvesson & Svenningson 2008) or ‘almost perpetual’ (Brunsson 2009).

The standard idea of market change implies the very opposite of management led reform: market change is guided by an ‘invisible hand’, a natural self-adjusting system. Even if elements of a ‘visible hand’ of market change are sometimes brought up in the public debate, it implicates something different than reforms of organizations. ‘Market reform’ is sometimes argued for and decided, however as an isolated shift from formal organization to market. After the shift is implemented, a spontaneously emerging order (Aspers 2011), derived from the natural self-adjusting market system, is believed to set in. Further, market reform is sometimes argued for as a response to market failure (Boyer 1990). The idea is that the state temporarily steps in from the outside, implements new regulation or shifts from market to organization. The idea of such extraordinary, limited and often criticized intervention from the outside has little resemblance with the idea of organizational change as a frequent, self-evident and extensive managerial task, performed from the inside of organizations. All in all, the general idea of market change is basically a non-managerial one.

However, individual markets and organizations are more similar than standard ideas of markets and organizations have us believe. A generic similarity is that both forms are organized phenomena. That is, they represent a decided order that contain one or more of the following generic elements: rules, hierarchy, membership, control and sanctions (Ahrne & Brunsson 2011). Further, both individual organizations and markets are in many cases recurrently re-organized, changing their formal structures over time (Flistein 2001, Garcia-Parpet 2007, Bjorkman et al 2014). The main question of this article is: how and why are markets re-organized? While theories of change of formal organizations have been developed for many decades, attempts to organize outside formal organizations have been largely neglected by organizational scholars (Ahrne & Brunsson ibid), not least so regarding the organization of markets. Nevertheless, such an analysis is both theoretically motivated and highly topical in the contemporary era of extensive marketizations and financial market crises.

In this article we argue that an open system perspective (Scott 1982, 1995) is as fundamental to understand market re-organization as it is in the case of formal organizations. Outside the elements that together constitute the individual market system – primarily; buyers, sellers, price, product, transactions and competition – there are a many factors, usually in a complex mix making market environments differ from each other. A generic external factor of the individual market is other markets, and often so what we here refer to as intervention markets: i.e. markets that intercede in the function of other markets (cf. Jutterström 2010, 2014). As will be empirically demonstrated, intervention markets may emerge or be decided in close relation to other markets with perceived failures or other problems. Accordingly, problems with markets can lead to more market, not necessarily less. Already existing markets may also become intervention markets by approaching and interfering with the function of other markets, as for example when the hotel market supply
side interceded in the organization of the taxi market in Stockholm city, due to perceived problems with the latter (Alexius 2014).

This article highlights the significance of intervention markets in the environment of individual markets. The re-organization of markets, as a consequence of intervention markets, is demonstrated in two empirical cases: the premium pension market for financial funds in Sweden (affected by an emergent advisory market) and several emission intensive markets among which we focus on markets for power production (all affected by a formally decided market for emission allowances in Europe, the EU ETS). The purpose of the study is to contribute to literature on organizing markets, and specifically to theory on market re-organization.

The article is structured as follows. We first give a brief picture on the subject of re-organization of formal organizations. Turning to market re-organization, we argue for the use of an open system perspective, and then define and exemplify intervention markets in the environments of individual markets. Next, we describe the design and method used to answer the research question. In the empirical section, we first describe the premium pension market and its re-organizations in order to handle the emergent advisory market, and then the market for power production and its relation to the market for emission rights in Europe. Subsequently, we analyze the characteristics of market-reorganizations in both cases by the use of generic organizational as well as market elements. The two cases are also compared. The article ends with a conclusion and discussion of the results.

**Theories of re-organization**

By focusing on re-organization this article is more delimited than to comprehend organizational change in general. As stated above, organization implies a decided order regarding one or more of the generic organizational elements: rules, hierarchy, membership, control and sanctions (Ahrne & Brunsson ibid.), and re-organization accordingly change of that formal order. However, organizations often change for other reasons than formal decisions, and re-organization is sometimes subsequent to organizational change as a way to legitimize it.

Formal structures of re-organizations may be, but are usually not, consistent with the daily practice of organizations. Such inconsistency can also be found in studies of markets (e.g. Johanson & Sjöberg 1992, Garcia-Parpet 2007, Furusten 2014). In the case of formal organizations, differences between organization and daily organizing can be of various degrees and take various forms. Between the popular idea of complete agreement between organization and practice on the one hand, and descriptions of complete decoupling and hypocrisy where change is only formal (Meyer & Rowan 1977, Brunsson 1989) on the other, the effects of re-organization is often intermediate forms of adaptation (Sahlin-Andersson 1996; Fernler 1996; Djelic 1998, Røvik 2000, Czarniawska and Sevón 2003). Re-organization is a double-edged sword. It not only has an important relationship to internal practice, although the degree of influence, forms and direction vary. As a generic provider of
legitimacy, it also affects the ability to attract external resources and to survive in the long term.

In organizational literature, there are several theories on why re-organizations occur. In opposition to classical management scholars who mainly perceived organizations as closed mechanical systems, many theories recognize organizations as open systems, and that dynamic environments exert a pressure on organizations for recurrent change. Although dynamic environments also result in emergent change as opposed to decided change (re-organization), we here focus on what drives the latter. Contingency theory (Woodward 1958, Burns & Stalker 1961, Mintzberg 1979) stresses alignment and good fits between organizational forms and the changing characteristics of their particular environments in order to be efficient. To population ecologists the ability to adapt to external change is a question of life and death to individual organizations, or whole populations of, organizations – and this line of literature has taken interest in inertial factors that hinder organizational change (Hannan & Freeman 1977, Aldrich 1979). In institutional organizational literature (Meyer & Rowan 1974, Scott 1995, Czarniawska & Sevôn 1996) adaptation to changing environments is seen as a quest for legitimacy. As stakeholders, rules and conceptions change over time, do the demands of what a ‘real’ or ‘good’ organization is and should do, driving re-organization. Such changing demands are not least manifested in popular management ideas, for example total quality management, lean production and sustainability (Jutterström & Norberg 2013). The popularity of management ideas tend to vary over time like fashion for clothes, diets or interior decoration, constantly providing organizations with attractive and seemingly new ideas of re-organization (Abrahamson 1996, Røvik 1996, 2002). As modern society tends to be perceived as increasingly turbulent (Oswick et al 2005), so too increase the demands for recurrent re-organization of formal organizations that need to fit their changing environments.

Other ideas are more stable over time, nevertheless driving re-organization. The idea that change and progress go hand in hand is a substantial part of modernism (von Wright 1993): what is regarded subject to management should also be recurrently changed to develop. Further, new managers are generally expected to initiate change rather than just administrate, in order to leave an impact on the organization they currently lead (Kotter 1986, Gabarro 2007).

Other explanations to re-organization primarily stem from internal aspects of organizations. In opposition to the instrumental-rational explanation, Sturdy (2004) account for several internal reasons to why organizations adopt popular ideas of re-organization, such as the psychodynamic, dramaturgical, political or cultural. Brunsson (2007) argues that re-organization is driven by the supply of problems, solutions and forgetfulness. The more of each, the more likely that re-organizations will occur. Formal organizations, also successful ones, are filled with perceived problems, often in the form of deviations between management oriented ideal types of organizations and practice. Re-organizations benefit from problems as problems tend to initiate search for new organizational concepts and make the organization more receptive to change. A supply of solutions is also needed to
trigger re-organization. Solutions can stem from internal innovation but are commonly provided by external stakeholders (Sahlin-Andersson & Engwall 2002). Simple, universal, user-friendly and seemingly new ideas become attractive solutions to old complex problems in organizations that earlier re-organizations failed to solve. However, with implementation, problems usually emerge (Baier et al 1986, Winter 2003), recurrently opening a window for new ideas. In organizations, people may remember problems with earlier re-organizations and remember that prior re-organizations with similar content to new ones did not succeed. While such organizational memory prevents re-organization, forgetfulness facilitates it. Forgetfulness increased by a high personal turnover, replacements in top management and new consultants promotes re-organization.

The frequency of re-organizations has also been normatively discussed. While fast-paced re-organizations have been argued to prevent organizations from becoming trapped in a spiral of inertia and to facilitate the development of change routines (Burgelman & Grove 2007, Nelson & Winter 1982, Hannan & Freeman 1977), other scholars have stressed the importance of stability periods to be able to translate experience into routines and ensure that learning occurs (Levinthal & March 1981, Levitt & March 1988).

Applying theories of recurrent re-organization on market change becomes somewhat peculiar, at least if we assume a standard market perspective. Do markets have dynamic environments of varying kinds that their structures need to be adapted to? How significant is the pressure from popular reform ideas on markets, and do such ideas change over time? Is market change equivalent to progress, and are formal market organizers expected to re-organize markets regardless of how they function? Are markets supplied with problems, solutions and forgetfulness and do they drive re-organization? And how does the pace of market re-organization affect how markets function? Peculiar or not to the reader, questions such as these evoke comparison between markets and formal organizations, thereby exploring the potential of using organizational theory in the analysis of markets.

**Intervention markets**

Recent studies have demonstrated that the organization of individual markets often have a multiplicity of various stakeholders (Björkman et al 2014, Alexius & Tamm-Hallström 2014, Brunsson & Jutterström forthcoming), as well as are surrounded by powerful ideas of what a market is and how it should function (Hernes 1978, Brunsson & Hägg 1992, Callon 1998, MacKenzie 2006, MacKenzie, Muniesa & Siu 2007). Applying an open system perspective on markets means drawing attention to such external factors and their relations to markets.

Outside the individual market there are also other markets, and how markets are related and affect each other is a central question for research (Aspers 2014). Literature on business strategy has since long dealt with how individual organizations can or should interact with other markets, including decisions about outsourcing (Barthélemy 2003) and vertical integration in the value chain depending for example on the strength of the supply side on related markets (Porter 1980). While the level of analysis is generally on market/organization in literature on strategy and marketing, other literature more
specifically analyses market.market relations. For example: different markets may offer substitute products satisfying similar needs to customers, where a price change in one market would affect total sales in the other (Lipsey et al 1983). And in the wake of successful new products (such as smartphones) markets for complementary products (such as applications, phone-cases etc) often emerge (Brandenburger et al 1996).

However, there is an absence of studies that explicitly analyze the organizational relation between individual markets. In this article we highlight a type of market that assumes a close relation to other markets, and typically so as a response to its failures or other problems as perceived by any to all of its stakeholders (Jutterström 2014). We refer to such markets as intervention markets, and define them as: markets that directly or indirectly intercede in the function of other markets.

Important to notice here is that all markets set up as a response of perceived failures and problems of other individual markets are not necessarily intervention markets. The alternative market is another type of organized response to perceived problems with individual markets, for example in the case of ethical consumption and local markets for organic food (Dubuisson-Quellier 2013).

Intervention markets intercede with the basic elements of other individual markets, for example with the supply side in general instead of with a single seller. Consequently, this implies that they intercede with the generic function of other individual markets. Intervention markets are common in contemporary society. As with markets in general, they could typically be defined from their specific product, and sometimes also from their geographical position (Aspers 2011). For example brokers help buyers and sellers with transactional problems on markets for real estate or other capital goods. In the wake of the internet revolution, a market for product information has emerged – with firms such as Pricerunner, Pricegrabber or Woot – promising to facilitate buyers’ decisions, for example on the grounds of price comparisons of items such as cameras, Ipads or television sets (Alexius & Löwenberg, forthcoming). And rating institutes affect what price organizations, including states, will have to pay for borrowing money on the capital market.

From our two empirical cases presented in this article, we also see that intervention markets vary in generic ways. Four such more fundamental grounds of variation concern the origin of the intervention market, incentives behind its origin, the problems identified and the solutions offered. Concerning the origin, the advisory market in the first case was an emergent market, while the European market for emission certificates was formally decided. Both emergent and formally decided markets contain organization in terms of rules, control, sanction, members etc. However, this difference in origin seems to affect their impact on other markets, as will be discussed in the end of the article. Concerning the incentives behind the set up or emergence of the intervention market, it was basically a for-profit one in the first case, and a non-profit one in the second case.

Concerning problems identified, the advisory market emerged as a consequence of buyers’ low transactional activity, and low self-esteem of being able to choose wisely between offered financial funds, generally speaking. This circumstance was perceived as a
market failure among many stakeholders. That is, the problem had to do with the internal function of the market. Somewhat conversely, the problem behind the market for emission rights was one of negative externalities. This means that markets with large emissions, such as steel producers, bring larger costs to third parties, such as society at large, than they do to their market parties (buyers and sellers). Externalities, negative as well as positive, are described as examples of market failures in literature on economics (Lipsey et al 1983) as they do not result in an optimal use of resources in society.

Concerning solutions, the solution of the advisory market was to analyze the supply side of funds and choose for the buyers, normally at a cost of approximately SEK 500 per year. That is, the solution offered was the very product of the intervention market. In the case of the emission market, the solution was the very market itself. That the supply sides of the targeted markets were to pay the societal costs for their CO2-emissions implied that the negative externalities were internalized. This was to be achieved by organization – that is by decided order in the form of rules, hierarchy, membership, control and sanctions – developed as a new intervention market.

In the studies presented, both intervention markets resulted in re-organization of the individual markets targeted, however in different ways and with different intentions as will be described. As a way of further exploring the concept of intervention markets and their impact on the organization of other individual markets, we will discuss the effects of intervention markets in sense of being emergent or formally decided. Tentatively, we will argue that this difference affects the attempts to handle intervention markets by the use of re-organization of the individual market.

**Methodology and Data**

*Research design and selection of cases*

With the overarching aim to better understand why and how individual markets are re-organized, this article explores the concept and impact of intervention markets. We do so by way of two empirical cases that illustrate how intervention markets affect other markets. The choice of studying two in-depth empirical cases had three main reasons. Firstly, two cases would provide a ground for comparison, and thus a generally enhanced perspective on the phenomenon. Secondly, the ground for comparison would help us see similarities and discuss intervention markets in more general terms. Thirdly, the ground for comparison would also provide a base for differences, and we chose to focus on *market origin* (as explained above) as a difference between intervention markets that potentially could be of importance in how they affect other markets. Whereas our first case of the PPM-advisory market may be categorized as an interventional market of an *emergent* character, primarily featuring industry self-organization of a more spontaneous kind, our second case of the EU ETS is rather an intervention market of formally *decided* market origin, in this case by
Methods and empirical material

Our paper builds on rich empirical data, collected using mainly qualitative research methods such as document studies, interviews and participant observation. Concerning the first case of the premium pension market, empirical data was collected from 23 interviews with civil servants, politicians, sellers, interest organizations and other market stakeholders. Interviews were normally about one hour long, semi-constructed, recorded and transcribed. As complements to the interviews, texts about the specific market were studied, mainly stemming from involved public authorities and mass media. Articles in Swedish mass media, published between 1998 and 2014, were mainly collected from the data base ‘Affärsdata’. Data was also collected from observations at seminars and meetings when given access.

Concerning the second case – power production markets and the EU ETS – empirical data was collected as part of a dissertation study on the Swedish power industry and its relation and responses to the new market (Rosenström 2014). In addition to informal conversations and a few observations, 23 interviews with different categories of workers and professions in two Swedish installations in the power industry and 18 interviews with representatives from the Swedish authorities responsible for the Swedish implementation and maintenance of the EU ETS were conducted between 2005-2007.1 The interviews were semi-structured and lasted about 1 hour each. All interviews were recorded and transcribed verbatim. In order to broaden the material to the general European EU ETS debate and development over the last decade, the content of a large number of documents from various stakeholders of the EU ETS have been studied. A pragmatic selection was made including articles in specialized media outlets (like the Swedish environmental magazine on industry issues and policies (Miljö och utveckling, Environment and Development), various reports, press releases and regulatory documents from authorities, think tanks, industry associations and other policy relevant organizations. Most of these document were drawn from the internet.

Theoretical framework for content analysis

Content analysis of the rich empirical data has been performed using a theoretical framework of central elements of organizations and markets (see e.g. Ahrne & Brunsson 2011, Rosenström 2014). In short, we have set out to investigate how the primary market/s have been re-organized by the intervention market in question. 1) What organizational elements - hierarchy, membership, rules, control/surveillance and sanctions have been used

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1 The Environmental Protection Agency (Naturvårdsverket) (4), the Energy Agency (Energimyndigheten) (4), County Administration Boards (Länsstyrelser) (4), accredited verifiers (4), Swedac (2)
and towards which market elements in the primary market/s (product/service, price, buyers, sellers, the exchange situation) have these organizational elements been directed?

Case 1: The Premium pension system and the advisory market

In June 1998, the Swedish Parliament passed the Bill of a new national pension system (SFS:1998:674), after many years of committee work. From a situation where the State had decided how to invest all pension fundings, all gainfully employed citizens of Sweden were now to invest a part of their future public pension fundings themselves. The first choice of funds would take place in autumn 1999, when 4.1 million Swedes were to allocate their money, a total of 56 billion SEK, in up to five different funds. This should be done on an internet based trading site – a new market for financial funds. A new authority, PPM\(^2\), was established to organize and administer the new market, and should also act as coordinating buyer to get volume discount for the buyers. If no individual choice was made, pension savers would automatically get their money pooled in the Premium Pension Fund, managed by the State. The extensive and demanding efforts to develop the market, especially the computer system that would manage and coordinate the market elements, led to a postponed market start of one year, to much dissatisfaction expressed in the public debate.

When the market opened in fall year 2000, nearly 3 million Swedes, or two-thirds of the buyers, chose actively between the funds offered. Fund fees averaged around 0.7 per cent per year of the capital invested, about half of the fees for the same funds outside the premium pension market. The new market had received comprehensive media coverage in Sweden – more than the Swedish media coverage of the Summer Olympics that year – and the PPM information and customer services had been utilized extensively.

Expectations among relevant officials and politicians were that the interest and activity would continue by itself after the successful start. However, after the first choice the general interest sky dived. The number of calls to PPM fell from approximately 6000 to 300 per day. Also the number of transactions plummeted. PPM had estimated the number of fund changes to 2000-4000 per day and had constructed the market to cope with peaks of 15,000 to 20,000 transactions per day. In early 2001 fund changes were, however, 300-600 per day. Among new pension savers, mainly young people, 18 percent made active choices. All in all, buyers’ interest and activity deviated considerably from what market organizers generally expected and wanted.

In March 2001 the PPM decided to reduce the number of employees at the service centers by 80 per cent, from one hundred to twenty people, and to wind up the contracted reserve capacity of sixty people. To increase the low activity PPM launched several market reforms the following years. Buyers’ behavior should primarily change by comprehensive

\(^2\)‘Premiepensionsmyndigheten’, i.e. the Premium Pension Authority, changed name from year 2010 to ‘Pensionsmyndigheten’.
information initiatives, such as the national poster campaign "You have money in your account", the letter campaign "The alarm clock" distributed to half a million inactive buyers and a DVD where the comedian Felix Herngren demonstrates how wrong things may go if you "don't give a crap and let someone else decide" instead of choosing actively, sent out to approximately 200,000 new buyers in 2002.

However, the activity and interest did not increase; in this respect the attempts failed. As a result of investigations of buyers’ attitudes the involved officials also developed new insights. Inactivity was not only a consequence of disinterest. A majority of the buyers wanted to choose actively but considered themselves to lack sufficient knowledge to be able to choose wisely (see also SoU 2005:87, Nyqvist 2008). These insights made PPM officials to change their attempts to reform buyer behavior. PPM now developed several tools to support buyer decision-making. One such tool was the rating system for funds, based on their historical performance, the manager’s experience and more. It was introduced in the market in 2007. Another support tool was the "Harbor Pilot", helping the individual buyer to choose appropriate funds based on risk level, income and age. The Harbour Pilot was launched in December 2005. In August 2006, 60,000 buyers had used it, according to PPM. Only 4000 had, however, changed funds by using the decision tool, which was described as a fiasco in mass media (Dagens Industri 2006-08-06).

The emergence of the intervention market
Despite considerable efforts to reform the demand side of the market, the problem of buyers' perceived ignorance and low market activity remained. However, an external solution to the market problem emerged: a premium pension advisory market with firms choosing and changing funds for pension savers at a cost of usually 500 SEK per year. The advisory market expanded quickly to manage hundreds of thousands of buyers’ choice. Two advisory firms that started early were ‘Monetar’ and ‘Solidar’. According to Solidar the intervention market comprised 300,000 customers in 2008. According to PPM new market had grown to about 600 000 clients by the end of 2009, about 25 advisory firms controlled a pension capital of approximately SEK 30 billion.

The emergence and explosive growth of the advisory market was totally unexpected among the formal market organizers (officials and politicians). "This didn’t exist in our world of imagination" when the system was constructed, as expressed by a politician and member of the pension group. To PPM and other market stakeholders the advisory market was also undesirable. There were several reasons for this. The advisory firms changed funds for a large portion or all of their customers at the same time. They also changed frequently. These mass changes increased the total fund transactions from 0.64 million in 2004 to 4.5 million in 2009. The extent and frequency of the mass changes increased PPM’s costs for administration and capital. The mass exchanges also created capacity problems in the transaction system. Now, PPM could get 50000-100000 fund changes to administer within a few hours, with totals of up to one billion SEK. The supply side of the premium pension market – the fund management firms – was similarly affected. Due to the huge purchases
and sales of funds that now could emerge rapidly and frequently, fund operations became uncertain, difficult and expensive to conduct.

According to interviewed politicians, one idea behind the premium pension project among some political parties was to make people more interested in stocks and business conditions in general. This estimated effect was threatened by the new advisory market whose offer offset buyers' needs for activity and interest. Officials and politicians also worried about the extra costs the advisory market brought on a large part of the buyers. Such extra costs hollowed future pensions while the choices of advisory firms generally gave lower yields than the market average over time (ref PPM).

The problems the advisory market brought on the premium pension market got PPM-officials to develop different solutions. Primarily, the advisory market should be managed by re-organizing the premium pension market. One way used to fight the advisory market was to disseminate information to buyers about how much extra charges erode the future pension in the long term. PPM conducted their own investigation in this matter and repeatedly spread the information through mass media. The purpose was to reduce pension savers' interest in the offers of the new market. Another idea discussed by PPM was to require electronic authentication of each buyer that changed funds in order to stop the computerized mass changes. Yet another idea that was developed was to introduce a fee per fund change. SEK 75 was discussed, but SEK 20 became PPM's proposal to the government in 2007. Such a fee would make the frequent mass changes very costly, and in practice exclude the advisory market from interfering with the function of the premium pension market. However, this proposal was not approved by the government, reluctant to interfere with markets in general.

Instead of trying to exclude the advisory market PPM began to develop a reform based on collaboration with the advisory market as a way to handle it (called the '2K project'). To gain access to the main market the sellers of the advisory market should be organized into the main market by having to enter into a standard contract with PPM, with technical and operational requirements. Developing the contract took several months and PPM estimated the cost to about 30 million SEK. However, many market stakeholders were dissatisfied with this re-organization, not least the fund companies that wanted to regulate the advisory market harder. Fund companies and their trade association also lobbied the government in this direction.

In late autumn 2009 the criticism of the 2K-reform escalated, and the debate also became public via mass media. Minister of Finance, Mats Odell, had hitherto supported the reform. But in December 2009, he declared in a debate article that he would "put an end to the PPM's wild west" (Dagens Industri 2009-12-11). The reform work stopped and the PPM went back to develop re-organizations aiming to exclude the advisory market. In 2011 the government approved the PPM’s request to end the advisory firms’ mass changes by re-organizing the premium market. Technically, this would be done by requiring a ‘CAPTCHA-
Code\textsuperscript{3} of each buyer at market login, something that would make computerized mass changes impossible. The re-organization, in terms of new regulation to manage the advisory market, was implemented in December 2011. Several consulting companies responded by establishing a ‘fund-in-fund’ solution, that is, putting up new funds on the premium pension market that invested in other funds in the same market, and transferring their customers’ capital to those funds. Nevertheless, the number of fund changes fell from 4.6 million in 2011 to 1.4 million 2012. In 2012, 621,000 buyers changed their funds, representing 10 percent of all pension savers in the premium market.

However, the re-organizations of the premium pension market to manage the advisory-market did not end there. In September 2014, PPM presented yet a proposition of a market-reorganization: a new regulation that would forbid fund prices higher than 0.8 percent after discount. The re-organization was mainly directed towards the firms of the advisory market. At the time, this market had more than twice as high fund prices as the average at the premium pension market, and controlled a capital of about 10 percent of the pension savers in their funds, according to PPM (Placera.nu 2014-09-03).

**Case 2. Power production and other emission intensive markets - and the European emission market (EU ETS)**

Politicians have various tools for organizing markets in their portfolios. One of the newer tools builds on an idea launched in economic theory in the 1960s: a new market can be used to shape existing markets. At the UN Kyoto conference of 1997, this idea was launched as one of the main future international policy instruments to prevent climate deterioration. Markets for emission allowances were presented as efficient compared to traditional policy mechanisms such as taxes or transitional incentives, as the emission market was expected to be able to drive investments in low carbon technologies where they were most cost effective. The idea was that by pricing emissions, emitting companies would be incentivized to take measures to reduce emissions and then store or sell their excess allowances in the market. Since a single global allowance market was not considered feasible in the late 1980s, the Kyoto conference encouraged regions and states to create their own local emissions markets as a means to combat the common environmental problem of greenhouse emissions (IETA, 2014).

**The decision on the intervention market**

Five years later, in October 2003, the European Parliament decided to make up a European emission market. The EU ETS (Emissions Trading Scheme) which was modeled on the U.S. Acid Rain SO2 cap-and-trade program, was to commence its exchange on 1 January 2005

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\textsuperscript{3} Combination of capture and gotcha/got you; sometimes presented as an acronym for the phrase “Completely Automated Public Turing test to tell Computers and Humans Apart”.

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(EDF 2012) as one of the tools to achieve an approximately 8 percent reduction of EU economy-wide greenhouse gas emissions below the 1990 level, by the year 2012 (2002/358/EC). The first of several implementation phases (2005-2007) was designed as a learning-by-doing phase for which the foremost goal was to establish a price and a functioning “market infrastructure” for trading, monitoring, reporting and verifying emissions. Above all, the establishment of the EU ETS required the establishment of a large number of rules. But the first concern of the market organizers back in 2003 was to decide who the rule-followers would be. A categorization of potential market participants was performed, and eventually a law was established that defined exactly which types of Co2-emitting installations, in which markets, that were obliged to become buyers/sellers in the new emissions market (2003/87/EC and 2004/156/EC). Covered installations were also categorized into different market sectors. Electricity generation (by far the largest emitting sector), oil refinery, coke and steel, cement and lime, glass, bricks and ceramics, pulp and paper and miscellaneous. In this sense, setting up the market was an ambitious policy intended to simultaneously intercede in the organization of many different emission intensive markets.

In terms of changes to these markets, it became forbidden for all ETS-covered installations to emit carbon dioxide without a granted authorization. This rule made companies obliged to apply for an allocation of allowances according to national allocation plans (NAP) decided upon in each member country. Each emitter was now required by law to tender one emission for each ton of actual emissions. Transaction registries with electronic accounts were organized to track the ownership of allowances and there were several venues available for emissions trading, for example the London-based European Climate Exchange (ECX). However, as there was no EU-harmonization of the allocation schemes and other market infrastructure requirements, this decentralization opened opportunities for stakeholders to engage in domestic lobbying and negotiations. In Sweden, for instance, steel industry representatives argued that the proposed emissions trading plan could hamper growth and stop investments due to the risk of competitive distortions, while the Swedish Bioenergy Association (Svebio) expressed concern that the price of the allowances would be too low due, which in turn would lead to an increase in the use of fossil fuels at the expense of investment in new bio energy friendly systems (M&U 2003-08-27; 2004-06-14; 2004-02-03). And as expected, following intensive domestic lobbying, the majority of member states did not create the necessary scarcity of allowances. Most installations thus got most allowances for free.

However, the companies in the ETS-covered markets were clearly affected in other ways. In the case of Swedish power production supply side and its relation to the ETS (Rosenström 2014), there were several new considerations to be made in the daily operations of installations. Above all, the new market led to a series of new requirements on the measurement of each installation’s annual emissions of carbon dioxide. In order to calculate the emissions as accurately as possible, three key variables were to be used in the measurement practice: the weight of carbon, the emission factor and the oxidation factor.
The mission to calculate the weight of a combusted fuel (e.g. carbon) is a technically complex one. The EU ETS therefore required the use of systemized methods and an advanced measuring chain of different elements that would assure the quality of the annual emission calculation. According to the authorization decision on approved measurements, each installation was to safeguard and verify the certainty of its measurements by comparing results from several different weighing stations. A first weighing of carbon was to take place onboard the boat (loaded with carbon), and was to be based on a scale which examined how deep into the water the load of carbon made the boat sink. Several more weight estimates were then added inside the warehouse, where volume estimations and regular weighing on belt scales were performed both before and after storage.

One scale was used to measure the carbon as it entered and made its exit from the warehouse, and another scale was placed just before the combustion boilers. As each shipload of carbon had a certain weight and a certain quality with respect to oxidation and emission factor of the carbon, it was problematic if the different loads of carbon were mixed in the warehouse. If this happened, the result would bring uncertainty to processes of calculating the oxidation and emission factor of the combusted carbon. Something that in turn could result in a future skewed allocation of allowances. Therefore, control was thought essential. The ETS thus added written instructions for how inspections would be performed in the operations of the installations. In pursuit of emission measurement quality, the ETS regulation also required trustworthy technicians responsible for calibration and adjustment of the scales etc. The ETS even required the presence of a third party calibration of the instruments used (e.g. scales), a so called "external calibration" where the external party usually was the instrument supplier. This external calibration had to be performed using special weights that were approved by Swedac, the Swedish accreditation authority.

On top of the extensive requirements on carbon weighing, there were requirements concerning the quality of carbon, i.e. the calculation of its emission factor and oxidation factor. The method used to establish these factors was based on a carbon sample taken onboard the boat. A bucket-full of carbon chunks were carefully selected from the load by an expert and sent to a laboratory for analysis. The ETS specifically called for systematized sampling from each boat load. In addition, the importance of keeping work methods constant was stressed, all in order to increase the precision of the work to enable an accurate calculation of the plant’s actual emissions.

Emissions measurement also gave rise to new administration and reporting tasks. A special group of statisticians at the installation became responsible for calculating, verifying and reporting the actual emissions, and for documenting errors and uncertainties in the operations. When the different weighing stations showed different results, as they frequently did, it became the task of these statisticians to decide which of all the measurements would be used in the final calculation. Routines and interpretation schemes then became important in order to handle the new demands of the market (such as relying mostly on the beltweigher just before the pan). Market analysis and public relations was another area expertise that saw the need to expand as a consequence of the ETS. As it
became important for the installations to understand how the ETS would affect the company's operations and results analysis included investments and costs for emission allowances, future fuels, strategies of competitors, potential impact on authorities, etc. As it was thought central to constantly monitor and seek to influence the conditions of the new market and how these might change, analysts were also responsible for increasing their contacts with the public Environment and Energy authorities of Sweden (mainly Naturvårdsverket and Energimyndigheten) and for cooperation with plants from other companies, f. ex. in industry associations like Swedish Energy (Svensk Energi) and Swedish District Heating (Association Svensk Fjärrvärme), which carried out joint lobbying towards politicians and authorities.

Overall, it was fairly easy to get the covered companies to become market participants and most of them met their obligations as buyers and sellers by virtue of the legislation and the threat of sanctions. When it came to the formal implementation of the new requirements in the everyday operational practice of the installations, many of the previously existing practices, for example concerning measuring, had been included in the allowance application and then approved by the authorities. Weight measurements of carbon has been implemented before market introduction, and methodologically procedure had not changed significantly. However, the ETS and its regulatory framework made existing procedures of the power production supply side in Sweden more systematic and rigorous. It also lent them a higher internal and external status. As an example, sampling and laboratory analysis had been carried out at regular intervals even before, but the allowance market introduction meant that sampling now systematized to include each load, and there was now a requirement that a third party would be present. Market introduction thus resulted primarily in an increased systematism and alertness.

To sum up, it turned out that most ETS-covered companies and their installations could and did adjust rather easily to the new market even though new requirements meant certain tasks now had to be performed by the installations and their owner companies, such as application for allocation of allowances, measurements and reports on emissions, and follow-ups on verification results. The ETS trial phase flexibility had allowed the installations to continue to work in a way that was familiar and moreover had lent their work a higher status since it was now politically approved. Although there was some dissatisfaction with some of the added administrative tasks, partly because they were considered unnecessary, overall, the administration continued without much resistance or problems. Possibly this rather smooth adjustment was as a consequence of the fact that the need for recruitment and additional costs for technical and organizational change projects had been lower than expected. And as companies were given room to interpret how they could adjust existing practices, implementation was facilitated and initial opponents to the system became less worried and less critical.

In terms of the emission market’s development and abilities to contribute to solve the urgent environmental problems caused by greenhouse emissions, the first decade of operations has been a bumpy one. Price volatility and over-allocation of free allowances
have been two main concerns. The trial phase of the ETS revealed weaknesses to the policy tool that had been presented as the cornerstone of the EU’s climate policy. Industry lobbyists complained about the lack of harmonization between member states and concerns were raised about higher electricity prices, a worsening global competitiveness and a negative impact on profitability and long term shareholder value (M&U 2005-03-23). Business leaders advocated a truly global system for emissions in order to equalize conditions of competition and eventually secured new opportunities to “earn” free allowances abroad. The harmonization debate also concerned the issue of possibly extending market membership, for example to the aluminum industry, smelters, fertilizer industry and the transport industry where especially air fare came into focus and was heavily debated (M&U 2005-09-20; 2005-10-26; 2005-12-08; 2007-01-04).

Today (2014) the ETS covers approximately 11,500 installations, which are owned by 5000 companies in 31 countries and around 50 percent of EU Co2 emissions and 43 percent of total EU greenhouse gas emissions (EDF & IETA, 2014; IETA 2014). It is now evident that the ETS has contributed to make carbon management systems a priority for companies across the EU. Surveys show that the ETS has indeed affected the behavior of firm managers. Owners of facilities covered by the ETS are incorporating carbon prices into their day-to-day operational decisions and into long-term investment planning. Research shows that the ETS has encouraged investments in energy efficiency, although the effect varies between industries and has been more pronounced for large investments (Egenhofer et al, 2011). Investment in energy efficiency and emission reductions have been especially large in the energy sector where many firms have responded by converting to gas-fired power stations in place of dirtier coal or oil plants (Ellerman et al, 2010; Rosenström 2014). Hence, to date, the organization of the ETS-market has clearly affected many different emission intensive markets in the EU (IETA, 2014), even to the point where large companies like Swedish energy producer Fortum, openly defends and advocates the market model (M&U, 2013-04-19) as the most preferable policy instrument in the climate toolbox. And the solution even seems to increase in popularity. In the recent UN Climate Conference in New York in September 2014, many voices were heard calling for a widened, and preferably, global carbon pricing initiative.

Analysis
In the beginning of the article we stated the main question: why and how are markets re-organized? Highlighting the environment of the individual market system in order to understand its re-organization, we specifically focused the article on the role of other markets. The two empirical cases of market re-organization have described the significance of what we refer to as intervention markets – i.e. markets that directly or indirectly intercede in the function of other markets – as drivers of individual market change. Both cases have demonstrated how intervention markets – one emerging more spontaneously and one formally decided – resulted in re-organizations of their targeted individual markets.
as a way to manage their interceptions. Re-organizations of the individual markets were made that, arguably, would not have occurred in the same way or at the same time without the occurrence of the described intervention markets. This basic result thereby contributes to questions of how markets are related and affect each other, and typically so on the subject of market re-organization. However, on a more detailed level, there were both similarities and differences between the two empirical cases of market/market organizational relationships. Below, we will summarize and compare the two empirical studies described. In this comparison, we will make use of both the organizational elements used in the cases as well as what market elements they have targeted.

In the first case of the premium pension market in Sweden, market organizers had repeatedly tried to solve the generally perceived market failure of an inactive demand side, with an extensive low self-esteem of choosing wisely. The emergence of the advisory market, offering a different solution to this perceived dysfunction of the premium pension market, on the one hand appealed to a large part of the pension savers, on the other brought with it several other problems to other market stakeholders, not least by sharply increasing transactional costs and uncertainty to the supply side. The rapidly emerging intervention market was met with much skepticism among important stakeholders of the premium pension market – the premium pension authority (PPM), involved politicians, the fund companies as well as their Swedish trade association.

Even though the PPM used other ways to manage the inventory market - mainly by spreading information to pension savers through mass media in Sweden, demonstrating the generally negative value of buying advisory market services - the authority mainly tried to handle it by developing ways to re-organize their ‘own’ market. A closer analysis of the attempts to handle the intervention market through re-organization shows that these were, firstly, directed towards various market elements (transaction, price, buyer etcetera), and secondly composed of various organizational elements (rules, membership, control etcetera). The re-organizations e-identity, transaction fees and captcha code meant that transactions would be changed by new regulation. The proposal to forbid fund fees over a certain level, targeted prices by the use of regulation. The 2K-reform aimed at changing the sellers on the intervention market by expanding the conditions for market membership. Advisory firms that did not accept the rules would not qualify as sellers on the main market.

As an end to the closer analysis of the first case, we can state that the intentions behind the work to re-organize the premium pension market in response to the emergence of the intervention market, mainly was the one of exclusion.

In the second case of the emission intensive markets and the European emission trading market (EU ETS) – stakeholders of the targeted markets were also largely skeptical about the emission trading market. As in the first case, extensive public discussions and lobbying occurred as a consequence. However, the main intention behind the re-organizations of the markets targeted with the intervention market was not exclusion but adaption. The empirical case has demonstrated how the targeted single markets in many ways were adjusted to handle the new intervention market.
The analysis of the organizational elements used in the re-organizations, and the market elements targeted, reveals that the impact of the decided emission trading market was comprehensive. We find that emission intensive markets all over Europe have been re-organized as a direct result of the setting up of the EU ETS. We note that the new market has brought on formal changes to all of the organizational elements – rules, hierarchy, membership, control and sanctions – of the covered markets. And that these organizational elements, in turn, have been directed towards sellers, price, product, transactions and competition, thus all markets elements but one – buyers.

As the EU ETS did not emerge as a spontaneous initiative among suppliers, the first and crucial achievement of the politicians setting up the new market was to establish and force a kind of “market membership” onto companies and their installations. As the process of categorizing markets, companies and installations unfolded, some managed to “escape” membership while others were forced into the new “polluters club” of intensive emitters ultimately decided by the politicians after several European and national rounds of lobbying and negotiations. After having established the new membership in EU legislation, the EU ETS-reformers went on to establish a large number of other rules, mainly binding directives, which the covered companies and their installations (the EU ETS members if you wish) are obliged to follow. Most notably, for those covered, it became against the law to emit carbon dioxide without a granted authorization from the national agencies which were made responsible for enforcing and overseeing the new market. In this role stipulated by the EU ETS legislation, national agencies have helped reorganize the covered markets by way of the organizational elements of authority and control. The EU ETS also added new sanctions (mainly penalties) to the companies in the covered markets, if they did not follow the rules as intended.

By having to apply for an authorization and an allocation of allowances, the EU ETS clearly aimed at reorganizing the sellers of the covered markets as they were forced onto the new market and into the roles of buyers and sellers of carbon allowances. Ultimately the ETS regulation clearly aimed to affect the core production of the sellers – their products and their prices. Partly by forcing covered sellers to add a cost for their emission. Partly by introducing systemized methods for measurement, calculation and verification of the annual emission of each installation. And both critical and less critical voices have claimed that the new market has affected the competition of the covered firms. Those critical have focused on the short-term perspective and claimed that the EU ETS has made it more difficult for the members of the “ETS polluters club” to compete with firms not covered, for example non-European firms not yet covered by another Emission Market. Those less critical have claimed that the green transformation of production that ETS-reformers ultimately hope for, will grant European firms a competitive advantage in the hopefully increasingly green economy of the future. Summing up, this politically decided intervention market has brought about a high degree of re-organization in the covered markets. Certainly on a formal level. And as time has passed since the market opened up a decade ago, reforms to the ETS have
gradually broadened and deepened the intervention further - covering more markets and countries, and further tightening the requirements on those already covered.

As an end to the closer analysis of the second case, we can state that the response to the emergence of the intervention market, mainly was the one of adaptation. That is, although the supply side and other market stakeholders expressed much discontent with the interventions markets in both cases, the intentions behind the re-organizations of the targeted markets differed.

**Conclusion and discussion**

This article has demonstrated how other markets, and typically so what we here refer to as intervention markets, drive re-organization of the individual market. In other words, the article has presented empirically based results on the organizational relation between markets (cf. Aspers 2011), proposing a contribution to theory on market change. In order to investigate the explanatory value of intervention markets, as well as of other external factors potentially relevant to understand market change, we initially argued for the significance of applying an open system perspective (Scott 1985, 1992) on market re-organization.

Turning from the question of why markets are re-organized to the question of how market re-organization is performed, we have used the generic elements of both organizations and markets to analyze that. In the first case, mainly regulations and membership were used in the attempts to change foremost the transactions, prices and sellers in order to manage the intervention market. In the second case, regulations, sanction, control and membership were used, targeting several market elements, foremost: sellers, products and prices.

**Discussion**

In the beginning of the article the concept of intervention market was defined and elaborated. We described four generic differences between intervention markets, based on our two empirical cases: origin, incentives, problems targeted and solutions offered. The difference of origin in our two empirical cases – i.e. the advisory market being a spontaneously emergent intervention market and the EU ETS a formally decided intervention market – seems to be of importance to understand the intentions behind the re-organizations of the affected markets. That is: the first case contained a spontaneously emergent intervention market, and the re-organizational response of the premium pension market organizers was largely to try to exclude the intervention market. The second case contained a formally decided intervention market, in this case decided by politicians. Despite discontent with the intervention market at the supply side of the affected markets, similar situation as in the first case, the intention behind the market re-organizations was a different one in the second case: namely adaption. A potential explanation to the different intentions expressed about the re-organizations could be the origin of the intervention market. Our findings indicate that a formally decided intervention market, in this case by
politicians, is harder to attempt to exclude than a spontaneously emerging one set up by other than authorities.

In our future research, we hope to explore whether such differences in intervention market origin may help explain for example a) the intentions behind the re-organization of the individual market, vis-à-vis the intervention market and b) the responses to the intervention market, such as the level of acceptance of or resistance to the intervention market. Tentatively we assume that the politically decided intervention market will generally face a lower level of resistance than emergent industry-driven intervention markets. Furthermore, we find evidence in our second case to suggest that politically decided intervention markets, such as the EU ETS, may enable a wider reach (the covering of more industries in more nations). If proven solid, these assumptions, which needs to be put to the test beyond the initial explorative comparison in this paper, would then highlight the impact of politicians’ authority as market makers and market organizers.

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