

Working Paper

Share Repurchases in Europe A Value Extraction Analysis

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Abstract

Encompassed by maximization of shareholder value ideology, large US corporations raised corporate distributions to record high levels, particularly by share repurchases which provide short-term boosts to their stock prices. Since the early 1980s, the deregulation of the US economy and the financialization wave provided incentives for companies to direct financial resources towards shareholder value instead of innovation and job creation. This study examines the repercussions of these trends in the context of Europe. It shows that despite there is a lag in deregulation that helped European corporations to establish similar attitudes of shareholder value orientation, large European companies have been increasingly focused on corporate distributions to the cost of decreasing investment in productive resources and employment opportunities. Although share repurchases remained concentrated in a smaller number of companies and they are performed occasionally, together with dividends, European companies distribute corporate cash to shareholders as much as US companies. Increasing value extraction in Europe in the form of corporate payouts will only aggravate the vulnerability of the continent's economy in the long run.

Keywords: Shareholder value, corporate finance, corporate payouts, share repurchases, Europe

JEL codes: D22, D30, G35, G38

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1. Financialization and the European corporation

Extensively studied in the last two decades by scholars from a variety of disciplines, financialization became a convenient word to describe the rising importance of any financial tool, measure, motive or actor within the functioning of economic activity. There has also been a growing public interest in financialization and its negative impact on economic performance since the US-led global financial crisis of 2008.

The impact of financialization, which also includes ideological and discourse-based instruments, can be extended to any act aiming to reap the returns of any investment through different mechanisms. Depending on the extent of power that is to be exerted by a specific economic actor, the benefits and the perils of financialization are unequally distributed. The literature on financialization has investigated a variety of actors of economic activity including but not limited to institutions, households, nations and corporations as creators and users of financial resources. The choice of research questions on financialization centers around specific group of actors depending on the focus. Where to locate financialization in the operation of the economy, and how it affects economic performance (Lazonick, 2011) are the central questions of any research on financialization.

The value extraction that defines financialization depends on a previous period of value creation. The massive value creation generated by the US managerial revolution made the United States the twentieth-century leader of the world economy (Chandler, 1990). This successful model of capitalistic production stumbled, however, with internal problems of conglomeration from the 1960s and innovative competition coming from foreign economies, especially from Japan in major consumer and capital goods sectors from the 1970s (Lazonick and O'Sullivan 2000). Since the 1980s the actors in the economy who have been able to extract value have differed from those who create value (Lazonick and Mazzucato, 2013). A finance-led growth perspective emerged in response to these productivity and profitability questions (Boyer, 2000) with important changes in the internal power structure of the firm (Lazonick, 1992; Stockhammer, 2004).

This paper is a part of a research project focused on the financialization at the corporate level with its roots in business activity and the structural changes in business organization, employment and productive activity since the early 1980s with varying consequences for different actors involved. The empirical analysis of the paper is based on the assertion that the roots of financialization can only be found within real economic or productive sectors where the value is created and extracted. The paper is primarily focused on value extraction through dividend payments and stock buybacks performed by public corporations. Excessive value extraction in these forms can undermine the long-run processes of creating value in business firms and in the economy. The damaging impacts on buybacks and dividends on innovation will only become apparent in the future (Lazonick, 2014; Lazonick, 2015b).

The significant role of financialization in the US context in the last 40 years and its impact on different aspects of economic activity have been deeply researched by a large group of scholars, not only restricted to economics. However, in the case of Europe, the discussion has remained limited and restricted to national contexts that are not comparable at the continent level. Compared to the research on the US and to some extent on the UK, many aspects of financialization in Europe have not yet been investigated. Thus, the purpose of this paper is to approach to the issue of the financialization of the corporation from a European perspective.

One would expect financialization to be less severe in Europe given the influence of opposing institutional and political economic forces of the continent. Any analysis of the historical-

institutional framework of Europe that also has an impact on transforming corporate strategies is beyond the scope of this paper. However, although it is the world's largest economy, the micro-foundations of financialization have been scarcely studied at the European level. The analysis of European transformation towards shareholder value requires concept or action specific research on the roots and causes of these transformations in corporate finance and corporate governance. One can later identify the interrelations between these themes around a common research framework aiming to explore the dynamics of European integration, financialization and corporate transformation. Thus, this paper aims to identify the course of value extraction at the corporate level and the underlying regulatory changes at European level related to corporate payouts. It seeks to find evidence if the prominent aspects of value extraction in the US corporation are also valid in the context of Europe and it tries to identify the differentiating aspects of corporate financialization in Europe. Together with the research on executive compensation in large European companies (Kotnik et al., 2017), this is a first attempt to explore the micro dynamics of continent level transformations in corporate activity and their consequences.

The context of financialization in Europe

The roots of financialization of the US corporation have been identified by a broad range of studies in the last two decades (Lazonick and O'Sullivan, 2000; Crotty, 2003; Duménil and Lévy, 2004; Boyer, 2005; Krippner, 2005; Fligstein and Shin, 2007; Orhangazi, 2008; Lazonick, 2012; 2014). However, the research on the transformation of European finance during the same period has remained highly fragmented and the limited number of existing studies which are focused on specific elements or countries within Europe are not deep enough to give a clear picture of the impact of financialization on European economy.

Indeed, the story of European capitalism in the last quarter of the twentieth century has not been extensively written from a political economic perspective which may help us to understand the depth and impact of financialization and shareholder value ideology in the following period. Little is known about whether financialization at microeconomic level is rooted deep in the 70s and 80s or is a more recent phenomenon that began only in the late 1990s. Some early research found limited evidence of the infiltration of shareholder value ideology in continental Europe and especially Germany (Dupuy and Lung, 2002; Jürgens et al., 2000; Stadler et.al, 2006). The evidence of adoption of shareholder-value ideology indicates that it was a modified form of the US version incorporating incremental changes through stakeholder consensus resulting in a negotiated form of shareholder value orientation (Vitols, 2004) or a slow transition process (Jackson et al., 2005). Although such views continued to be endorsed by others (Deeg, 2014), some more recent accounts on European financialization stress its impact on rising inequalities, degrading industrial relations practices and changing corporate governance mechanisms in favor of a 'shareholder' perspective (Hein; 2015; Peters, 2011; Prosser, 2014) highlight a fundamental break with the earlier period of capitalism, a very similar case to the US. In a similar vein, some other studies also link the full establishment of financialization in Europe to the integration of the European Union and the introduction of the single currency area, allowing free mobility of financial capital (Eichacker, 2015; Rossi, 2013; Nölke, 2016).

Nevertheless, some major issues related to financialization are much less analyzed for Europe. There is a research gap in firm-level issues like the role of European-level takeovers and M&As as 'engines of shareholder wealth maximization'; share-based remuneration of executives and employees in relation to shareholder value; and the trend of shareholder value distribution in European firms during the financialization era. Investigation of such highly interconnected issues is needed for a full-scale understanding of European corporate financialization. This study is an attempt to push forward that research agenda, focusing on value extraction through corporate payouts, and specifically share repurchases.

2. Regulatory background of share repurchases

Offered as a solution by economists known as agency theorists to the corporate management problems of the day, shareholder-value creation gradually turned into a discursive construct, independent of a firm's productive performance (Froud et al., 2006). Turning into a principle of corporate governance first among Anglo Saxon corporations, it also became part of discussion in Europe. In 1999, the OECD issued 'The OECD Principles of Corporate Governance' emphasizing that corporations should be run, first and foremost, in the interests of shareholders (OECD 1999, in Lazonick and O'Sullivan, 2000) and its similar tone has continued in the 2014-2015 review of the principles (Lazonick, 2015a).

One major manifestation of shareholder value-oriented corporate governance is the practice of corporate payouts, and especially share repurchases.

The first European-level regulation on share repurchases was codified in the Second Council Directive 77/91/EEC of 13 December 1976 on 'coordination of safeguards' (EEC, 1977). Aiming to establish a common framework for the understanding of shareholder and creditor protection in European Economic Community countries, the directive also gave shape to some basic rules of share repurchasing in order to prevent any corporate abuse of shareholder and creditor rights. These rules included the sources to be utilized, authorization, duration, the interval of price to be paid and volume of shares to be repurchased in member countries even if its restrictions were not stringent. The directive only concerned the EEC countries where the laws permit a company to buy back its own shares. Until the late 1990s share repurchases were either prohibited or very difficult to implement due to legal restrictions in most of the Continental European countries. The only country which facilitated share repurchases through legislation before the 1990s was the UK. The amount of UK share buybacks made up the bulk of total European share repurchase programs (Rau and Vermaelen, 2002). In France, Germany and other major European economies, share repurchase was made easy to implement or legal only after regulatory changes between 1998 and 2000 (see Annex for more details).

Subsequently, in December 2003 the European Commission initiated a new regulation on buy-back programs in order to separate them from insider dealing and market manipulation ('market abuse') activities which were prohibited by another directive earlier in the same year. In the new regulation, share repurchases are regarded as a useful tool in stabilizing markets and market abuse regulations should not be applied to buy-back programs (EC Directive 2003/6/EC and EC Regulation 2273/2003). The regulation defined necessary conditions and restrictions regarding buy-backs to provide a safe harbor for companies as long as they observe certain conditions. It was binding and directly applicable for member states without any further action on the part of the national authorities but the EU member states to establish monitoring mechanisms to provide transparency of disclosure in order to prevent abuses. Indeed, sanctions and administrative measures are valid only when the competent national authority defines an action as a market abuse.

In April 2014, the previous directives prohibiting insider trading and market abuse within the EU were repealed and replaced with an updated EU regulation which entered into force following its publication. The regulation was followed with a supplementing text published in early 2016 on buy-back programs, updating the 2003 directive.

Whether EU level regulation defined the scope of repurchase activity in detail, country specific rules still represent a diversity although the EC regulation brought, in some cases, greater flexibility to firms having share repurchase activity. Despite existing differences between the US and European legislation of share repurchases, repurchase activity in Europe quickly surged upward in 2000s and followed a similar trend with the US before the global economic crisis.

The following part provides country level share repurchase information including repurchase regulation, tax and insider issues regarding repurchases. The fourth part discusses the limited and mostly empirical literature on European repurchases and their findings. In the fifth part, a descriptive analysis of the repurchase activity of major European countries is provided for a 16-year period starting with 2000. The annex provides detailed information on major EU economies and Switzerland about their share repurchase regulations.

3. Country specific regulatory information[†]

France

In France, share repurchases were not illegal before the modification of the law in 1998, but they were difficult to implement and the acquired shares could not be cancelled (Ginglinger and L'Her, 2006). Since 1998, a French company can acquire up to 10% of its outstanding shares within a period of 18 months after the announcement of the repurchase program and it can cancel shares or reserve them. The regulation was slightly changed in October 2004 to comply with the EC regulation and the disclosure period is limited to seven days after the repurchase day, which was the beginning of the following month for the repurchases of a given month (Ginglinger and Hamon, 2009). 1998 Regulation made shareholders' gain of repurchases subject to capital gains tax that companies are required to pay a fee of 0.15% of the total value of shares repurchased to the stock market's related directorate. According to Dereeper and Romon (2006), right after the regulatory change in 1998, the ratio of quoted companies that initiated a repurchase program increased from 8.9% in 1998 to 42.1% in 2001 and 324 companies out of 600 companies that have programs performed stock buybacks for a net amount of €37.2 billion between 1998 and 2001. During the same period the same group of companies distributed €47.8 billion in the form of dividends.

UK

In the UK, share repurchases were legalized by the Companies Act in 1981 with various restrictions, a year before the safe harbor promulgation of Rule 10b-18 in the US. A UK company can only repurchase its shares during an authorization only valid between two consecutive annual general meetings which is usually 12 months and companies must publish their repurchase activity on the regulatory news services on the next business day with every detail (Crawford and Wang, 2012). A repurchase during an authorization period cannot exceed 15% of total outstanding shares and the price to be paid should not be more than 5% above the average price for the five business days before the repurchase day (Kim et al., 2003). Moreover, the company has to cancel all the shares repurchased.

A major difference with the US, UK companies are prohibited to repurchase their shares during the same period when their executives are not allowed to trade in their own shares of the companies. Practically, share repurchases are not allowed two months before the publication of annual and semiannual earnings and one month before the publication of quarterly results (Rau and Vermaelen, 2002).

Germany

In Germany, repurchasing shares was prohibited until 1998 when the regulation was changed and share repurchases were allowed. German companies are allowed to repurchase up to 10% of nominal share capital only with the funds that could have otherwise been paid out to shareholders in the form of dividends. Repurchases programs have to be authorized by the annual general meeting of shareholders for a maximum period of 18 months and announced to the public (Hackethal and Zdantchouk, 2005). Maximum number of shares to be repurchased, minimum and maximum repurchase prices, and the method of repurchasing must be declared in the announcement similar to the EC regulation.

[†] For a detailed discussion of the history of share repurchases in the US, see Lazonick, 2012, 2015c

Switzerland

Share repurchases in Switzerland started after the revision of the Swiss Corporate Law in 1992 even though there was no open ban of repurchases before the revision (Mueller, 2005). Swiss companies are eligible to purchase up to 10% of outstanding shares without shareholder approval or any definite period of time and price limits. The only restriction concerning a repurchase program is that the acquisition of shares must be financed by retained earnings and/or freely distributable reserves (Pfenninger and Wyss, 2010). A company can repurchase its shares only ten days prior to the earnings announcement and daily repurchases cannot exceed 25% of the average daily volume on the first trading line over the previous month. A company must declare the number of shares acquired and the price paid per share at the latest on the fifth trading day following repurchase of its own shares.

Sweden

Sweden was the last major country in the EU to allow share repurchases. Companies quoted on the Swedish stock exchange were allowed to repurchase their own shares beginning with March 2000 with the usual claims of more flexible capital structures, better use of excess cash or protection against hostile take-overs (Peterson et al., 2003).

Although Sweden implemented the EC's 2003 directive in 2005, the Stockholm Stock Exchange has stricter rules on the implementation of repurchase programs and their disclosure. The board of directors must announce when they have decided to initiate a share repurchase program and the initiation announcements by the Swedish companies are always followed by actual repurchases. And according to Swedish law, companies may not engage in trading in their own shares during the 30 days prior to the publishing of interim reports and companies are required to disclose their repurchase transactions on a daily basis (Råsbrant, 2013).

Spain

Spanish public companies can repurchase up to 10% of their shares and hold them as treasury shares. Companies are free to reissue these treasury shares in the market or to cancel them through a capital reduction (Gonzales and Gonzales, 2004). When the number of shares repurchased is over the limit of 10%, the companies are obliged to choose between one of these two options. Otherwise the acquired shares must be disposed or redeemed within three years after acquisition. The companies must create a reserve for the same amount as the repurchase of the securities. Thus, the company's equity is not reduced below the aggregate of the share capital and the non-distributable reserves after any repurchase (Hoedl, 2014).

Italy

The legislation on share repurchases in Italy was also put in order in the late 1990s with the changes in Italian Civil Code. With minor changes, it was streamlined with the EU directory in 2004. The law allows companies to launch repurchase programs only if they purchase fully paid shares and they have sources (profits and/or reserves) available as stated by the last approved balance sheet. They cannot get loans or give guarantees for the purchase of their own shares except for dedicated authorization provided by the extraordinary shareholders' meeting (Sorge, 2014). The companies can sell the shares that were previously bought back as long as the selling of treasury shares has been authorized by shareholders. Therefore, Italian companies have the possibility to purchase and sell back their shares in the open market without any other formal procedure (De Cesari et al., 2011).

The analysis on the regulatory background shows that there is a variety between European countries in the implementation of repurchase programs adopted with shareholder approval even though many EU countries implemented EC recommendations and directives into their corporate law throughout the 2000s. In many countries, the distribution of cash through share repurchase is restricted to the available resources in the form of ‘distributable profits’ which establish a direct link between profits and corporate distributions in the form of share repurchases that may or may not provide incentives for companies to distribute cash to shareholders depending on the company, industry or country level dynamics of economic and financial relations among different stakeholders.

3. Mainstream literature on share repurchases in Europe

The literature on share repurchases in Europe is highly limited and most of the studies are re-applications of the work on share repurchases in the US which is mostly done by mainstream financial economists. Research questions of these empirical studies mainly focus on the determinants of share repurchases and their results in terms of stock-market valuation. Most of this literature has adopted the perspective and tools of agency theory, and they mainly analyze the patterns of share-repurchase activity across Europe or in specific European countries. Several hypotheses tested before for the US companies are reapplied with continent or country-level data and they find evidence to support the hypotheses of liquidity (De Cesari, et.al, 2011) or the cash-flow hypothesis that companies use repurchases mainly to distribute cash flows in order to reduce agency conflicts (Lee and Suh, 2011; Benhamouda and Watson, 2010; Bessler, et.al, 2014). Another group of studies also analyzes the stock market reactions to share repurchases in specific countries (Andriosopoulos and Lasfer, 2015; Bessler et.al, 2014; Crawford and Wang, 2012; Råsbrant, 2013).

Apart from these papers, only a very small number of studies discuss other aspects of share repurchases in Europe. Dereeper and Romon (2006) discuss the relation between dividends and share repurchases, and they find evidence that these two are complementary in the case of France with a sample of 600 companies quoted on the Paris stock market between 1998 and 2001, contrary to the common belief of substitution effect between dividends and stock buybacks. Eije and Megginson (2008) study the same relation at the EU level for a longer period between 1989 and 2005 and find a similarity with the US that the number of companies paying dividends is decreasing while their total dividend payments are increasing that complements the surge in share repurchases, especially after 2000. They also examine the impact of privatization on payout policies of divested companies, and find that these companies account one quarter of the EU dividends and share repurchases while they represent less than 2% of the number of quoted companies.

Finally, Ginglinger and Hamon (2009) examine the compliance of French companies with share repurchase regulations and document illegal repurchases before earning announcements, with very few companies fully complying with regulations. In the most well-known case, right after the September 11 attacks, Vivendi bought back its shares worth around \$1.2 billion illegally. Later, its CEO and some other executives were found guilty, and were given fines and suspended sentences.

4. Data analysis

This part discusses the empirical data of corporate financial behavior among largest European companies. We analyze the companies of the S&P Europe 350 index in order to directly compare them with S&P 500 US companies, another index of the same provider. The index covers around 70% of Europe's market capitalization, and the companies constituting the index are among the largest European companies. As of 2015, these companies employ more than 22 million people around the world. The dataset is comprised of selected financial data of these 350 companies between 2000 and 2015, depending on their IPO years. Table 1 provides the information on the number of companies in the analysis from the represented countries in the Index.

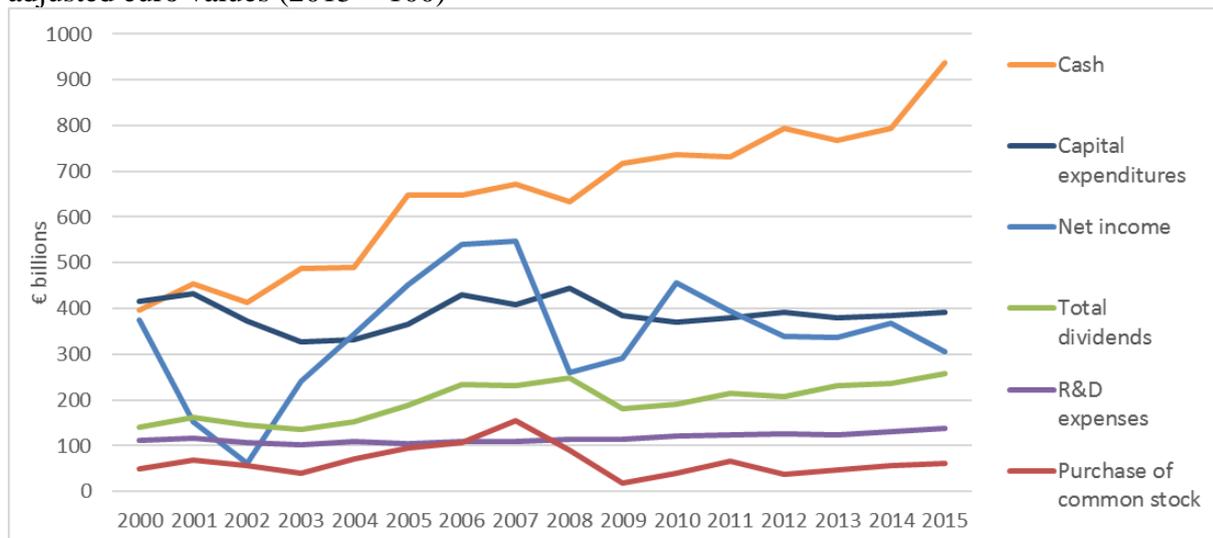
Table 1: S&P Europe 350 constituents as of January 2016

Country	Number of firms in the S&P Europe 350 as of January 2016	Number of firms with IPOs before 2000
Netherlands	19	16
Switzerland	28	26
Spain	20	12
United Kingdom	99	88
France	48	41
Germany	38	33
Finland	9	9
Denmark	11	9
Belgium	10	9
Luxembourg	4	2
Norway	6	4
Sweden	24	23
Italy	19	16
Austria	3	3
Ireland	8	6
Portugal	2	1
Total	348	298

Source: Capital IQ and company web sites

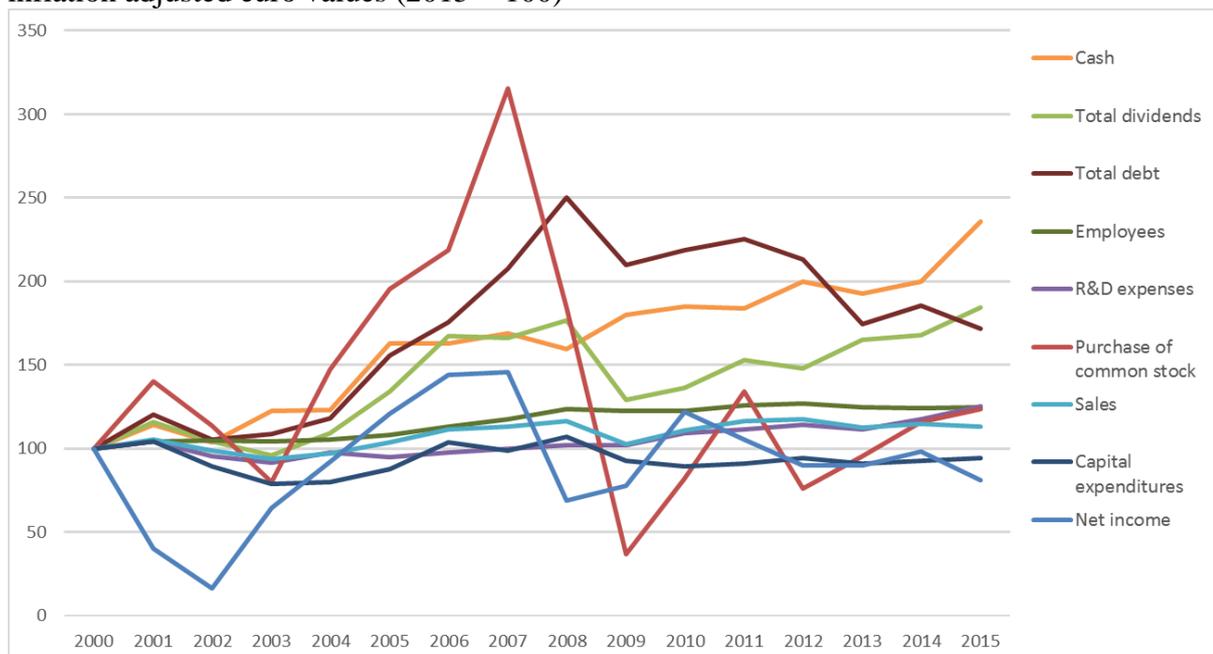
The historical data of 298 companies since 2000 allow us to see the trend in major sources and uses of funds across these companies during the period. The first figure below show the total amounts of selected financials of 298 companies during the period in eurozone inflation adjusted values. The second figure provides the growth of these financials as well as total debt, total revenue and employment when 2000 is taken as the base year. In the second figure, the negative growth of net income and capital expenditures is especially visible. Very moderate growth of total revenues and employment is far outstripped by the increase in cash levels, total debt and total dividends of the same companies. Big fluctuations of share repurchases before and after the global recession were stabilized with a moderate growth at the end of the period compared to 2000.

Figure 1: Selected financials of 298 S&P Europe 350 companies, 2000-2015, Eurozone inflation adjusted euro values (2015 = 100)



Source: CapitalIQ and company annual reports

Figure 2: Selected financials of 298 S&P Europe 350 companies, 2000-2015, 2000 = 100, Eurozone inflation adjusted euro values (2015 = 100)

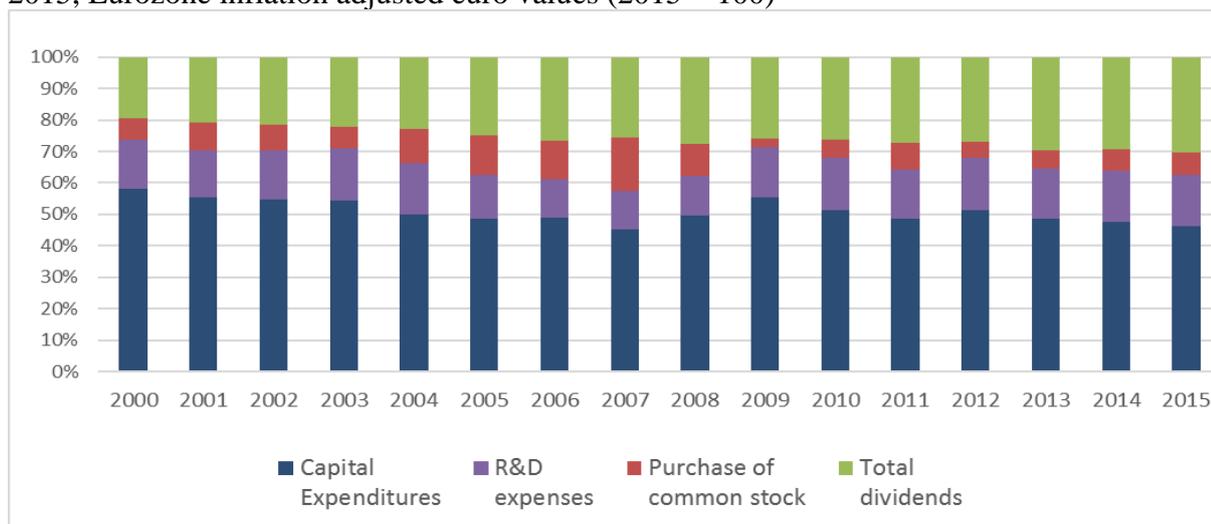


Source: CapitalIQ and company annual reports

The third figure provides the proportion of major uses of funds during the same period for the same group of companies. The main visible change is the decrease in capital expenditures with more than ten percentage points and an equivalent increase in dividend payments since 2000. The proportions of R&D expenditures and share repurchases remained the same[‡]. The next section details the discussion of share repurchases and dividends.

[‡] The trend in R&D between 2000 and 2015 may not be correct due to inadequate reporting of R&D expenditures by European companies in earlier years of the period and before. They may be higher in the early years of 2000s resulting in a decreasing trend throughout the period.

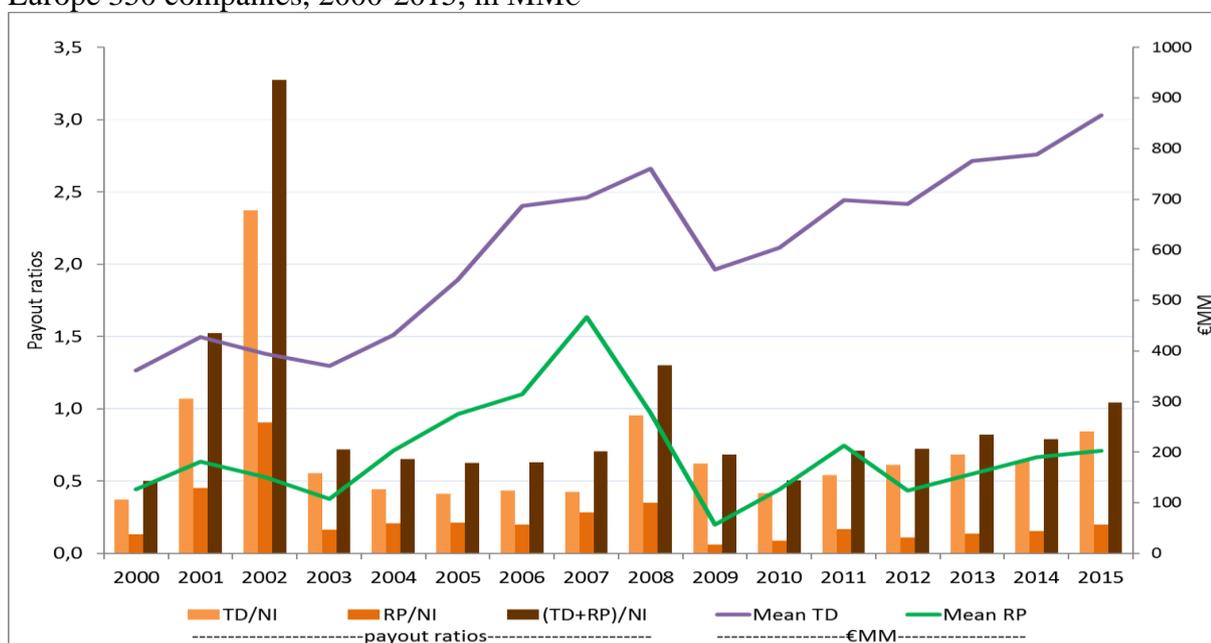
Figure 3: Proportional values of selected uses of funds of 298 S&P Europe 350 companies, 2000-2015, Eurozone inflation adjusted euro values (2015 = 100)



Source: CapitalIQ and company annual reports

Figure 4 shows the average levels of corporate payouts and their ratios for the same group of European companies. From 2000 through 2015 these 298 companies expended €945 billion on stock repurchases, an average of €3.17 billion per company, and distributed a total of €2.88 trillion in cash dividends, an average of €9.66 billion per company. Combined, all the 348 companies in the S&P 350-Europe Index in January 2016 repurchased €64 billion of their own stock and distributed €284 billion in dividends in 2015, representing 110% percent of their net income.

Figure 4: Payout ratios and average values of dividend payments and stock repurchases of 298 S&P Europe 350 companies, 2000-2015, in MME



The data are for 298 companies in the S&P Europe-350 Index in January 2016 that were publicly listed since 2000. Data for companies that end their fiscal years during the first five months of the calendar year are attributed to the previous year. RP, stock repurchases; TD, total dividends (common and preferred); NI, net income (after tax before extraordinary items)

Source: CapitalIQ and company annual reports

The table below shows year-to-year changes in net income, repurchases and dividends of these 298 companies for the same period to show whether the changes in the payout ratios are driven by changes in dividends and share repurchases (numerator) or by the changes in net income (denominator). The percentage changes indicate that the net income and payouts are equally important to determine the sign of year-to-year change in payout ratios. The underlined percentage changes in the net income, share repurchases and dividends show a decisive impact on the change in the total payout ratio in that year compared to the previous year. More than two thirds of the period, net income had either a positive or negative impact on the payout ratio providing its opposite sign of change. In around half of the period, it is the increase or decrease in payouts that define the sign of change of the payout ratio.

Table 2: Year-to-year changes in net income and corporate payouts in percentages

	Net Income	Share Repurchases	Dividends	(TD+RP)/NI
2001	<u>-58,9</u>	43,2	18,2	203,1
2002	<u>-58,4</u>	-17,0	-7,8	114,9
2003	<u>300,9</u>	<u>-28,5</u>	-6,0	-78,1
2004	<u>46,0</u>	89,0	16,4	-9,1
2005	<u>34,2</u>	35,4	25,3	-4,2
2006	21,5	<u>14,2</u>	<u>27,2</u>	1,1
2007	4,5	<u>48,5</u>	2,4	11,8
2008	<u>-51,9</u>	-40,5	8,1	84,4
2009	13,2	<u>-79,7</u>	<u>-26,2</u>	-47,5
2010	<u>60,7</u>	125,7	7,7	-26,3
2011	<u>-11,3</u>	<u>68,0</u>	<u>15,4</u>	40,4
2012	<u>-12,5</u>	-41,7	-1,2	2,1
2013	0,7	<u>26,3</u>	<u>12,5</u>	13,8
2014	<u>8,9</u>	20,8	1,6	-3,7
2015	<u>-17,1</u>	<u>6,7</u>	<u>9,8</u>	31,7

Beside stock price appreciation to increase capital gains, two main forms of maximizing shareholder value are the distributions in the form of dividends and share repurchases. In the last 20 years, especially in the United States, share repurchases became ‘systemic and massive’ (Lazonick, 2014) and together with dividends they reached more than 90% of net income among large US corporations between 2000 and 2015. In Europe, they were also intensified after regulatory changes in late 1990s and early 2000s facilitating the share repurchase activity of large European corporations. Nevertheless, Figure 5.1 shows that the extent of stock buybacks in Europe is still limited compared to the US. Repurchase activity in Europe didn’t recover after the peak years of global recession as it has happened in the US. The main form of shareholder value distribution in Europe is common and preferred dividend payments as it is shown in Figure 5.2. Shown in Figure 5.3, large European companies distribute as much as US companies on average when share repurchases and dividends are added together. The widening gap since 2014 can be explained by record high share repurchases by large US companies in the last two years of the period and the depreciation of the Euro against US dollar during the same period.

The last figure (5.4) shows the comparison of total payout as a proportion of net income between the US and Europe. For the first time during the period, in 2015 annual total payout exceeded net income in a non-recession year on both sides of the Atlantic. This shows the insistence to the shareholder value maximization of US and European corporations despite all the criticism they have faced since the beginning of the global recession.

Figure 5.1: Average share repurchases of 419 US S&P500 and 298 S&P Europe 350 companies, 2000-2015, in MM\$

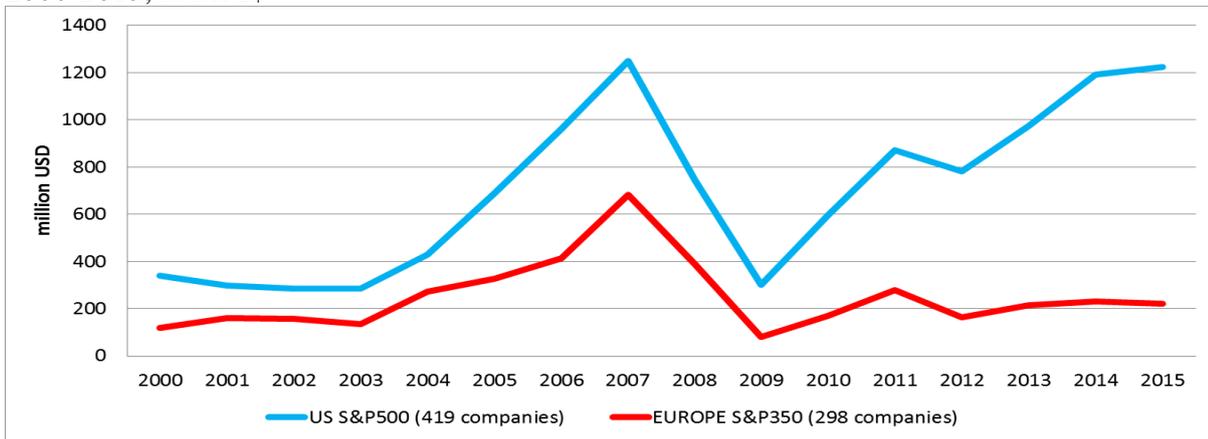


Figure 5.2: Average dividends of 419 US S&P500 and 298 S&P Europe 350 companies, 2000-2015, in MM\$

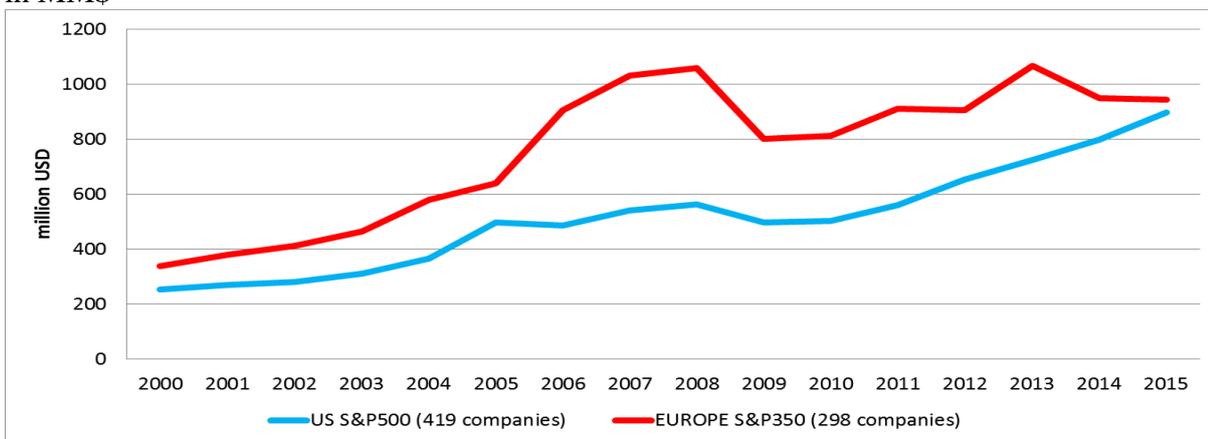


Figure 5.3: Average share repurchases + dividends of 419 US S&P500 and 298 S&P Europe 350 companies, 2000-2015, in MM\$

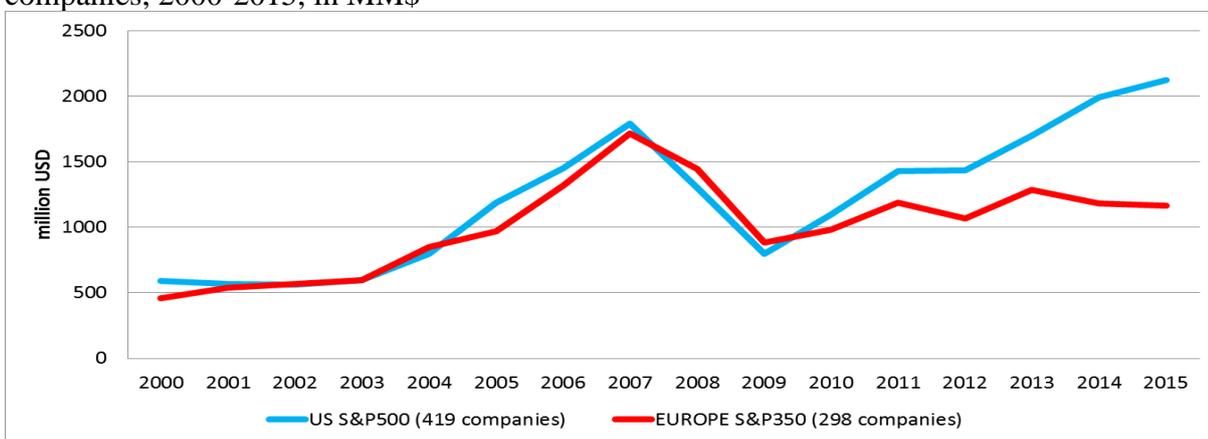
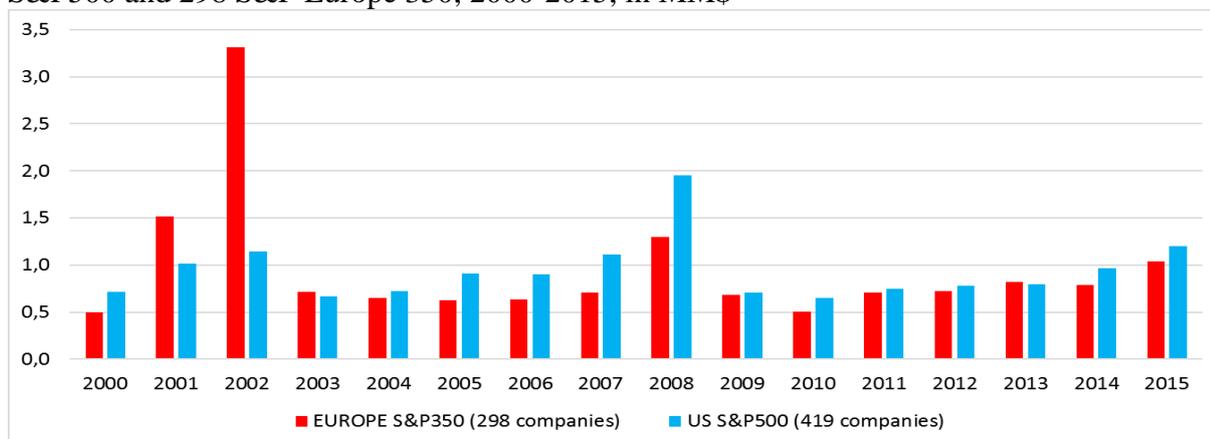


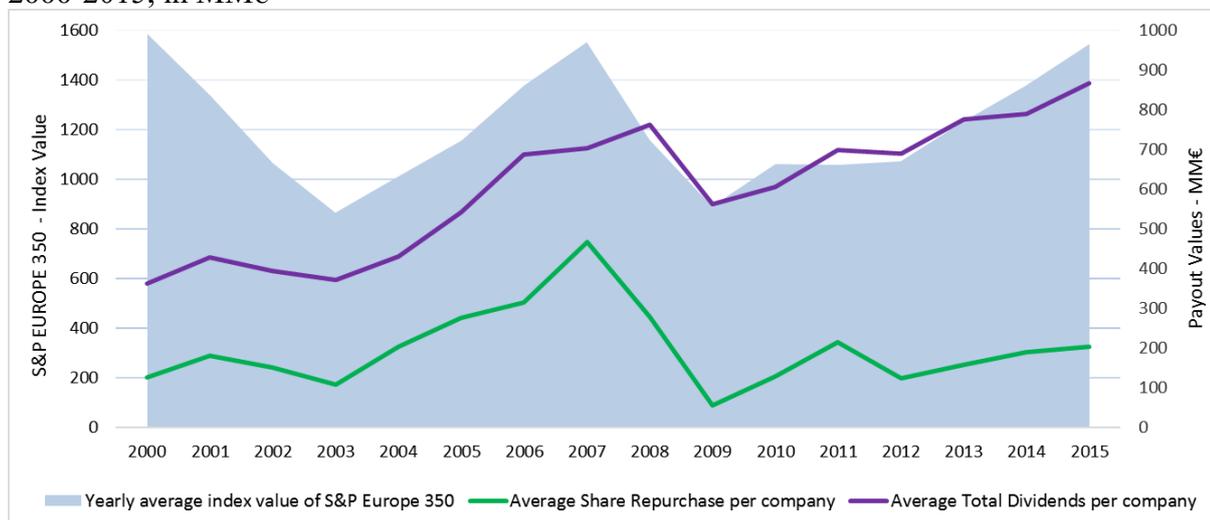
Figure 5.4: Total payout (share repurchases + dividends) as a proportion of net income of 419 US S&P500 and 298 S&P Europe 350, 2000-2015, in MMS\$



Source: CapitalIQ and company annual reports

In his research, Lazonick (2014) documented an increase in share repurchases of S&P500 companies when the S&P500 index is also on the rise during the last two decades. Although the US corporate executives claim that they do share repurchases only when the stock prices of their companies are undervalued, the data show the opposite. The European data is not different. Figure 6 below shows the average dividend and share repurchase expenditures for the 298 companies in the S&P Europe 350 index in relation to the movement of the index. Both dividends and share repurchases follow the same trend with the index and their averages have been increasing during periods of high stock prices.

Figure 6: S&P Europe 350 annual average index value and average distributions per company, 2000-2015, in MM€



Source: CapitalIQ and company annual reports

The following table shows the country distribution of corporate payouts of the dataset during the same period. The averages per company and per year for each company show that each company spent on average around €200 million on stock repurchases and €600 million on dividends each year since 2000. In total, these companies on average spent around 77% of their net income on share repurchases and dividends during the period. The distributions of companies from Switzerland, UK, France, Finland and Italy exceeded the Europe average. In Italy, the ratio was greater than 100% and

in the UK, it became very close to the total net income of the companies during the period. While the distribution through share repurchases accounts for only around one fourth of the total payouts on average, in countries like Switzerland, Netherlands, Denmark and Luxembourg, share repurchases have higher proportions compared to dividends. These are the “repurchase-intensive” countries with above average share repurchase to dividend ratios.

In countries like Germany, Netherlands, Finland and Spain, there is a very strong concentration of share repurchases that are performed by a very small number of companies. In Germany, Deutsche Bank, Siemens and E.ON, the top three repurchasers, constitute around 50 percent of the total share repurchases performed by 33 companies of the country in the dataset. In the Netherlands, the share of top three (Royal Dutch Shell, Philips and KPN) in total repurchases of the country’s 16 companies in the dataset is 53 percent. This ratio for Finland and Spain is 94 and 76 percent respectively. Share repurchases are concentrated in a smaller group of largest European companies.

Table 3: Per country average share repurchases and dividends and total share repurchases and dividends as a proportion of net income of 298 S&P Europe 350 companies, 2000-2015

Country	# of firms	Average repurchase per company 2000-2015 total €MM	Average dividend per company 2000-2015 total €MM	RP/NI	TD/NI	(TD+RP)/NI	RP/TD (repurchase intensity)
Switzerland	26	6630	10632	0,31	0,50	0,81	0,62
Netherlands	16	6487	13647	0,22	0,46	0,68	0,48
Spain	12	3396	13518	0,13	0,50	0,63	0,25
United Kingdom	88	3279	9680	0,24	0,71	0,95	0,34
France	41	3242	10682	0,18	0,61	0,79	0,30
Germany	33	2694	10507	0,12	0,46	0,58	0,26
Denmark	9	2569	4539	0,25	0,44	0,68	0,57
Finland	9	2559	6913	0,24	0,64	0,88	0,37
Belgium	9	1673	7836	0,12	0,58	0,70	0,21
Luxembourg	2	1548	3068	0,25	0,50	0,76	0,50
Norway	4	1247	6306	0,09	0,46	0,55	0,20
Sweden	23	1129	6148	0,10	0,52	0,62	0,18
Italy	16	1003	13051	0,07	0,94	1,01	0,08
Austria	3	770	3327	0,10	0,42	0,52	0,23
Ireland	6	666	2065	0,12	0,36	0,48	0,32
Portugal	1	159	7638	0,01	0,57	0,58	0,02
Total	298	3171	9660	0.19	0.58	0.77	0.33

Source: CapitalIQ and company annual reports

The next table shows the distribution of payouts across different industry groups. In a handful of industries, the total payout ratios are very close to or exceed 100 percent. Despite heavy losses they incur in crisis years, companies in sectors like utilities, telecommunication, technology equipment and media kept spending large amounts in share repurchases and dividends resulted in very high payout ratios for the whole period. And despite very high amounts of average share repurchases and dividends, in sectors like pharmaceuticals, energy and foods & beverages, total payout ratios are around the total average due to very high profitability in these sectors.

Table 4: Per industry average share repurchases and dividends and total share repurchases and dividends as a proportion of net income of 298 S&P Europe 350 companies, 2000-2015

GICS Industry Group	# of firms	Average repurchase per company 2000-2015 €MM	Average repurchase per company per year €MM	Average dividend per company 2000-2015 €MM	Average dividend per company per year €MM	RP/NI	TD/NI	(TD+RP)/NI
Automobiles & Components	12	1403	88	6688	418	0,06	0,28	0,34
Consumer Durables & Apparel	11	995	62	4312	269	0,09	0,39	0,48
Consumer Services	6	1707	107	5472	342	0,21	0,69	0,90
Media	12	2162	135	4718	295	0,80	1,74	2,54
Retailing	4	2845	178	7450	466	0,24	0,62	0,85
Food & Staples Retailing	9	2062	129	5325	333	0,22	0,57	0,80
Food, Beverage & Tobacco	15	5524	345	12785	799	0,23	0,53	0,76
Household & Personal Products	6	4003	250	11824	739	0,16	0,49	0,65
Energy	13	9336	584	26881	1680	0,17	0,49	0,66
Banks	27	2457	154	15712	982	0,09	0,57	0,65
Diversified Financials	12	5972	373	6135	383	0,43	0,44	0,86
Insurance	16	2494	156	11597	725	0,11	0,52	0,63
Real Estate	6	416	26	3903	244	0,06	0,53	0,58
Health Care Equipment & Services	5	627	39	2457	154	0,10	0,40	0,51
Pharmaceuticals, Biotech & Life Sciences	13	9755	610	19264	1204	0,27	0,53	0,80
Capital Goods	38	2087	130	4638	290	0,23	0,51	0,74
Commercial & Professional Services	12	1031	64	2445	153	0,27	0,64	0,91
Transportation	12	968	60	4006	250	0,11	0,44	0,54
Semiconductors & Semicon. Equipment	4	1329	83	1395	87	0,37	0,39	0,75
Software & Services	4	1532	96	3440	215	0,15	0,33	0,48
Technology Hardware & Equipment	4	4868	304	8392	525	0,60	1,03	1,63
Materials	28	1970	123	5205	325	0,19	0,50	0,69
Telecommunication Services	13	5994	375	24398	1525	0,57	2,30	2,87
Utilities	16	2827	177	14543	909	0,16	0,81	0,97
TOTAL	298	3171	198	9660	604	0.19	0.58	0.77

Source: CapitalIQ and company annual reports

The last table shows the top 30 repurchaser companies in Europe during the period. Similar to the US, oil, ICT, pharmaceutical and financial companies are major repurchasers. A large number of these companies have very high total payout ratios.

Even though BP stopped repurchasing its own shares and reduced dividend amounts for a period after 2009, it was the biggest repurchaser in Europe during the 16-year period. In 2010, BP caused

the largest marine oil spill in history, and the company agreed to pay \$20 billion to cover environmental damage and other claims by the Mexican Gulf states and local governments. The expected court decision of a \$20 billion penalty didn't stop the company from relaunching share repurchases in 2013 and increasing its dividend payments even though it stopped repurchases in 2015 due to a massive loss because of decreasing oil prices and negative net income.

BP is followed by a group of mostly British and Swiss companies in these four major repurchasing industries. Another interesting case is Nokia. The company couldn't compete in mobile devices segments and divested its mobile devices business in 2014 after heavy losses in the previous years. During the period between 2003 and 2008, when many other companies were getting prepared for the technological breakthroughs in mobile devices, the company spent €18.5 billion on share repurchases and distributed €9.5 billion as dividends. In the last two years of the period until its merger with Alcatel, the company restarted distributing payouts in the form share repurchases and dividends and spent €0.6 and €1.9 billion on buybacks and dividends respectively. And in the period after the merger, the company didn't stop its payout activity and spent another €1.1 billion on these two forms of payouts in 2016 despite its -€766 million negative income for that year.

Pharmaceutical companies are among the top repurchasers. Although there are only 13 pharmaceutical and biotechnology companies, representing only 4.4 percent of the S&P350 sample, in the top 30, there are five pharmaceutical companies with very high share repurchase and dividend figures and three of them are among the top 10. These companies devote between 84 and 96 percent of their net incomes in payouts while they continuously argue individually or through their industry associations like PhRMA that they need high prices to fund their R&D expenditures.

Table 5: Top 30 share repurchasing companies in Europe, 2000-2015

Rank	Company	Country	GICS Industry Group	Total Share Repurchases 2000-2015 €MM	Total Dividends 2000-2015 €MM	RP/NI	TD/NI	(TD+RP)/NI
1	BP	UK	Energy	47046	80416	0,29	0,49	0,78
2	Nestle	Switzerland	Food, Beverage and Tobacco	40779	52663	0,37	0,48	0,85
3	Novartis	Switzerland	Pharmaceuticals, Biotech. & Life Sci.	32684	45721	0,35	0,49	0,84
4	GlaxoSmithKline	UK	Pharmaceuticals, Biotech. & Life Sci.	32322	62426	0,33	0,63	0,96
5	Royal Dutch Shell	Netherlands	Energy	29875	108302	0,13	0,47	0,60
6	UBS	Switzerland	Diversified Financials	29812	18727	0,89	0,56	1,45
7	Total	France	Energy	28484	64851	0,20	0,45	0,65
8	Vodafone Group	UK	Telecommunication Services	27624	86726	n/a	n/a	n/a*
9	AstraZeneca	UK	Pharmaceuticals, Biotech. & Life Sci.	22740	31644	0,38	0,53	0,91
10	Deutsche Bank	Germany	Diversified Financials	19455	15263	0,53	0,41	0,94
11	Nokia	Finland	Technology Hardware & Equip.	19370	20642	0,53	0,57	1,10
12	Telefonica	Spain	Telecommunication Services	15328	47450	0,24	0,74	0,98
13	Credit Suisse Group	Switzerland	Diversified Financials	15316	14749	0,56	0,54	1,10
14	BNP Paribas	France	Banks	15135	29040	0,19	0,37	0,56
15	Koninklijke Philips	Netherlands	Capital Goods	14948	6904	0,80	0,37	1,17
16	Novo Nordisk	Denmark	Pharmaceuticals, Biotech. & Life Sci.	14268	9397	0,53	0,35	0,87
17	Siemens	Germany	Capital Goods	13639	25376	0,21	0,40	0,61
18	Sanofi	France	Pharmaceuticals, Biotech. & Life Sci.	12813	32913	0,25	0,63	0,88
19	Diageo	UK	Food, Beverage & Tobacco	12200	19855	0,34	0,56	0,90
20	Barclays	UK	Banks	11743	32982	0,23	0,64	0,86
21	E.ON	Germany	Utilities	11547	30190	0,30	0,78	1,08
22	L'Oréal	France	Household & Personal Products	11306	13541	0,32	0,38	0,70
23	British American Tobacco	UK	Food, Beverage & Tobacco	11049	32126	0,24	0,69	0,92
24	Rio Tinto	UK	Materials	10903	24479	0,22	0,50	0,72
25	Koninklijke KPN	Netherlands	Telecommunication Services	10211	9854	3,09	2,98	6,07
26	Iberdrola	Spain	Utilities	10047	10337	0,31	0,32	0,64
27	BASF	Germany	Materials	9768	24572	0,20	0,50	0,69
28	Ing Groep	Netherlands	Banks	9673	20832	0,14	0,30	0,45
29	Koninklijke Ahold	Netherlands	Food & Staples Retailing	8685	3391	0,97	0,38	1,35
30	Daimler	Germany	Automobiles & Components	8237	27693	0,14	0,48	0,63

*Vodafone's payout ratios are not calculated due to negative total net income value for the period.

Source: CapitalIQ and company annual reports

Conclusion

This study is a preliminary effort to understand the change in the dynamics of value distribution at corporate level in Europe. Preliminary results of the descriptive analysis of value extraction among largest European companies show that the trend of increasing payouts, decreasing investment and mediocre growth of employment despite the continuing consolidation of industries through merger and acquisition, which continue to shape the European landscape of large corporations.

The economic crisis that continues to put strain on European communities, pressure on working conditions and increase insecurity across the continent, has had very little impact on the value extraction orientation of big corporations that is largely shaped by the maximization of shareholder value ideology. Despite stagnant growth or European economies, corporations continued to choose to increase payouts and reduce investments throughout the period analyzed.

Given the ongoing rise in inequality and the loss of employment opportunities across the continent, the dead end of increasing value extraction in Europe will only aggravate the vulnerability of the continent's economy and will result in a structural impotency to solve ever the growing economic and social problems of communities.

Further research on the shift in corporate governance practices including the changes in ownership structures, executives' understanding of the purpose of business enterprise and their disconnection from the idea of a social and equitable European economy will help to unveil the root causes of rising shareholder value distribution and put the findings of this study in its place.

References

- Andriosopoulos D., Lasfer M. [2015] “The market valuation of share repurchases in Europe”, *Journal of Banking & Finance*, vol. 55, pp. 327-339.
- Benhamouda Z., Watson R. [2010] “A research note on the determinants of UK corporate share repurchase decisions”, *Applied Financial Economics*, vol. 20, pp. 529-541.
- Bessler W., Drobetz W., Seim M. [2014] “Share repurchases of initial public offerings: motives, valuation effects, and the impact of market regulation”, *The European Journal of Finance*, vol. 20, n°3, pp. 232-263.
- Boyer R. [2000] “Is a Finance-led growth regime a viable alternative to Fordism? A preliminary analysis”, *Economy & Society*, vol. 29 n°1, pp. 111-145.
- Boyer R. [2005] “From Shareholder Value to CEO Power: The Paradox of the 1990s”, *Competition and Change*, vol. 9, pp. 7–47.
- Chandler A. [1990] *Scale and Scope: The Dynamics of Industrial Capitalism*, Cambridge: Belknap Press of Harvard University Press.
- Crawford I., Wang Z. [2012] “Is the market underreacting or overreacting to open market share repurchases? A UK perspective”, *Research in International Business and Finance*, vol. 26, pp. 26-46.
- Crotty J. [2003] “The Neoliberal Paradox: The Impact of Destructive Product Market Competition and Impatient Finance on Nonfinancial Corporations in the Neoliberal Era”, *Review of Radical Political Economics*, vol. 35, n°3, pp. 271-279.
- De Cesari A., Espenlaub S., Khurshed A. [2011] “Stock repurchases and treasury share sales: Do they stabilize price and enhance liquidity?”, *Journal of Corporate Finance*, vol. 17, pp. 1558-1579.
- Deeg R. [2004] “Financialization and Institutional Change in Capitalisms: A Comparison of the US and Germany”, *The Journal of Comparative Economic Studies*, vol. 9, pp. 47-68.
- Dereeper S., Romon F. [2006] “Rachats d’actions versus dividendes: effet de substitution sur le marché boursier français?”, *Finance Contrôle Stratégie*, vol. 9, n°5, pp. 157-186.
- Duménil G., Lévy D. [2004] *Capital Resurgent: Roots of the Neoliberal Revolution*, Cambridge: Harvard University Press.
- Dupuy C., Lung Y. [2002] “Institutional Investors and the Car Industry Geographic Focalisation and Industrial Strategies”, *Competition & Change*, vol. 6, n°1, pp. 43-60.
- EC [2003a] “Directive 2003/6/EC of 28 January 2003 on insider dealing and market manipulation (market abuse)”, *Official Journal of European Communities*, n°L 96.

- EC [2003b] “Commission Regulation No 2273/2003 of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards exemptions for buy-back programmes and stabilisation of financial instruments”, *Official Journal of European Communities*, n°L 336.
- EEC [1977] “Second Council Directive of 13 December 1976”, *Official Journal of European Communities*, n°L 26.
- Eichacker N. [2015] “German Financialization, the Global Financial Crisis, and the Eurozone Crisis”, *Political Economy Research Institute Working Paper*, n°404.
- Fligstein N., Shin T. [2007] “Shareholder Value and the Transformation of the U.S. Economy, 1984–2000”, *Sociological Forum*, vol. 22, n°4, pp. 399-424.
- Froud J., Johal S., Leaver A., Williams K. [2006] *Financialization and Strategy Narrative and Numbers*, London: Routledge.
- Ginglinger E., Hamon, J. [2009] “Share repurchase regulations: Do firms play by the rules?”, *International Review of Law and Economics*, vol. 29, n°2, pp. 81-96.
- Ginglinger E., L’Her, J. F. [2006] “Ownership Structure and Open Market Stock Repurchases in France”, *The European Journal of Finance*, vol. 12, n°1, pp. 77-94.
- Gonzalez V. M., Gonzalez F. [2004] “Stock repurchases with legal restrictions Evidence from Spain”, *The European Journal of Finance*, vol. 10, 526–541.
- Hackethal A., Zdantchouk A. [2006] “Signaling Power of Open Market Share Repurchases in Germany”, *Financial Markets and Portfolio Management*, vol. 20, n°2, pp. 123-151.
- Hein E. [2015] “Finance-dominated capitalism and re-distribution of income: a Kaleckian perspective”, *Cambridge Journal of Economics*, vol. 39, n°3, pp. 907-934.
- Hoedl C. [2014] “Spain Treasury Shares Guide”, *IBA Corporate and M&A Law Committee*, Madrid
- Jackson G., Höpner M., Kurdelbusch A. [2005] “Corporate Governance and Employees in Germany: Changing Linkages, Complementarities, and Tensions” in Gospel H., Pendleton A. eds., *Corporate Governance and Labour Management: An International Comparison*, Oxford: Oxford University Press, pp. 84–121.
- Jürgens U., Naumann K., Rupp J. [2000] “Shareholder value in an adverse environment: The German case”, *Economy & Society*, vol. 29, n°1, pp. 54-79.
- Kim J., Schremper R., Varaiya N. [2004] “Open Market Repurchase Regulations: A Cross-Country Examination”, available at SSRN: <https://ssrn.com/abstract=496003>
- Kotnik P., Sakiñç M. E., Slavec A., Guduraš D. [2017] “Executive compensation in Europe: Realized gains from stock-based pay” ISIGrowth Working Paper
- Krippner G. R. [2005] “The financialization of the American economy”, *Socio-Economic Review*, vol. 3, n°2, pp. 173-208.

- Lazonick W. [1992] “Controlling the Market for Corporate Control: The Historical Significance of Managerial Capitalism”, *Industrial and Corporate Change*, vol. 1, n°3, pp. 445-488.
- Lazonick W. [2011] “Reforming the Financialized Business Corporation” *The Academic-Industry Research Network Working Paper*.
- Lazonick W. [2012] “Financialization of the U.S. corporation- what has been lost and how it can be regained”, *MPRA Paper* n°42307
- Lazonick W. [2014] “Profits Without Prosperity”, *Harvard Business Review*, September, pp. 3-11.
- Lazonick W. [2015a] “Comments on the draft of the 2014-2015 revision of the OECD Principles of Corporate Governance”, January 4.
- Lazonick W. [2015b] “Labor in the Twenty-First Century: The Top 0.1% and the Disappearing Middle-Class” Institute for New Economic Thinking Working Paper, n°4, February.
- Lazonick W. [2015c] “Buybacks: From Basics to Politics”, *The Academic-Industry Research Network Special Report*, August 19, available at: <http://www.theairnet.org/v3/backbone/uploads/2015/08/Lazonick-Buybacks-Basics-to-Politics-20150819.pdf>
- Lazonick W., O’Sullivan M. [2000] “Maximizing Shareholder Value: A New Ideology for Corporate Governance”, *Economy & Society*, vol. 29, n°1, pp. 13-35.
- Lazonick W., Mazzucato M. [2013] “The Risk-Reward Nexus in the Innovation-Inequality Relationship: Who Takes the Risks? Who Gets the Rewards?”, *Industrial and Corporate Change*, vol. 22, n°4, pp. 1093-1128.
- Lee B. S., Suh J. [2011] “Cash holdings and share repurchases: International evidence”, *Journal of Corporate Finance*, vol. 17, pp. 1306-1329.
- Mueller P. [2005] “Share Repurchases and Repayments of Nominal Value: The Swiss Alternative to Dividends”, accessible at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.517.8475&rep=rep1&type=pdf>
- Nölke A. [2016] “Finanzialisierung als Kernproblem eines sozialen Europas”, *WSI-Mitteilungen*, n°01/2016, pp. 41-48.
- OECD [1999] *OECD Principles of Corporate Governance*, Paris.
- Orhangazi Ö. [2008] “Financialization and capital accumulation in the non-financial corporate sector: a theoretical and empirical investigation on the U.S. economy, 1973-2003”, *Cambridge Journal of Economics*, vol. 32, n°6, pp. 863-886.
- Peters J. [2011] “The Rise of Finance and the Decline of Organised Labour in the Advanced Capitalist Countries”, *New Political Economy*, vol. 16, n°1, pp. 73-99.

- Peterson C., Fredriksson J., Nilfjord A. [2003] “Common Stock Repurchases A First Year Swedish Sample and Comparative Reactions on the US and Finnish Markets”, *Liiketaloudellinen Aikakauskirja*, ISSN 0024-3469, vol. 52, n°4, pp. 455-474.
- Pfenninger M., Wyss L. [2010] “Buyback of equity and debt securities in Switzerland”, *Walder Wyss & Partners Ltd*, accessible at <https://www.walderwyss.com/publications/653.pdf>
- Prosser T. [2014] “Financialization and the reform of European industrial relations systems”, *European Journal of Industrial Relations*, vol. 20, n°4, pp. 351-365.
- Rau R., Vermaelen T. [2002] “Regulation, Taxes, and Share Repurchases in the United Kingdom”, *The Journal of Business*, vol. 75, n°2, pp. 245-282.
- Rossi S. [2013] “Financialisation and monetary union in Europe: the monetary–structural causes of the euro-area crisis”, *Cambridge Journal of Regions, Economy and Society*, vol. 6, n°3, pp. 381-400.
- Råsbrant J. [2013] “The price impact of open market share repurchases”, available at SSRN: <https://ssrn.com/abstract=1780967>
- Stadler C., Kurt M., Hinterhuber H., Birgit R. [2006] “The CEO’s attitude towards the Shareholder Value and the Stakeholder Model. A comparison between the Continental European and the Anglo-Saxon Perspective”, *Problems and Perspectives in Management*, vol. 4, n°3, pp. 41-48.
- Stockhammer E. [2004] “Financialisation and the Slowdown of Accumulation”, *Cambridge Journal of Economics*, vol. 28, pp. 719–741.
- Sorge M. M. [2014] “Italy Treasury Shares Guide”, *IBA Corporate and M&A Law Committee*, Rome/Milan
- Vitols S. [2004] “Negotiated Shareholder Value: The German Variant of an Anglo-American Practice”, *Competition & Change*, vol. 8, pp. 357–374.
- von Eije H., Megginson W. L. [2008] “Dividends and share repurchases in the European Union”, *Journal of Financial Economics*, vol. 89, pp. 347-374.

Annex

Share Repurchase Regulation in the US and Major European Economies

Table A.1: Legislation chronology of share repurchases in selected countries

	Before the major legislation	First legislation year concerning repurchases	Year of major legislation change that facilitates repurchases
US	Legal but with limited use	1934	1982
France	Was not illegal but difficult to implement	1998	1998
Germany	Prohibited	1931	1998
Sweden	Prohibited	1975	2000
Switzerland	Was not illegal but difficult to implement	1992	1992
Spain	n/a	1989	1989
United Kingdom	Prohibited by Common Law: Trevor v. Whitworth (1887)	1981	1981
Italy	n/a	1998	1998

Table A.2: Repurchase program restrictions

US	Program Approval	Board
	Program Period	No limit (up to Board's decision)
	Program Volume	No limit (up to Board's decision)
	Program Price	None
	Program Restrictions	-
France	Program Approval	Shareholder Meeting + COB
	Program Period	Maximum 18 months
	Program Volume	Up to 10% of outstanding shares
	Program Price	None
	Program Restrictions	Repurchase cannot exceed retained earnings free from legal or statutory commitment
Germany	Program Approval	Shareholder Meeting
	Program Period	Maximum 18 months
	Program Volume	Up to 10% of outstanding shares
	Program Price	AGM decision must also include the highest and lowest repurchase price
	Program Restrictions	Only funds that could have otherwise been paid out to shareholders in the form of dividends can be disbursed for repurchase transactions
Sweden	Program Approval	Shareholder Meeting
	Program Period	~12 months (until the next ordinary or extra-ordinary AGM)
	Program Volume	Up to 10% of outstanding shares
	Program Price	The highest and lowest repurchase price per share should be declared
	Program Restrictions	Repurchases can only be made out of distributable profits
Switzerland	Program Approval	Board
	Program Period	Maximum 3 years
	Program Volume	Up to 10% of outstanding shares
	Program Price	None
	Program Restrictions	The acquisition of the shares must be financed by retained earnings and/or freely distributable reserves.
Spain	Program Approval	Shareholder Meeting
	Program Period	Maximum 18 months
	Program Volume	Up to 10% of outstanding shares
	Program Price	The highest and lowest repurchase price per share should be declared
	Program Restrictions	The issuer must create a reserve for the same amount as the repurchase of the securities
United Kingdom	Program Approval	Shareholder Meeting
	Program Period	Maximum 18 months
	Program Volume	15% or more of a company's share capital must be made by a tender offer
	Program Price	None
	Program Restrictions	Only "distributable profits" or the proceeds of a fresh issue of shares (made for the purpose of the purchase) can be used to repurchase
Italy	Program Approval	Shareholder Meeting
	Program Period	Maximum 18 months
	Program Volume	Up to 10% of outstanding shares
	Program Price	None
	Program Restrictions	The company cannot get loans or provide guarantees for the purchase or subscription of treasury shares.

Table A.3: Repurchase activity restrictions and disclosure rules

US	Repurchase Period	Anytime during the program
	Repurchase Volume	The issuer's purchases on that day do not exceed 25% of the average daily trading volume of its shares, except for a purchase of a "block" of shares
	Repurchase Timing	The issuer does not affect any purchase of its shares during the final 30 minutes (10 minutes for 2 actively-traded shares) before the close of the session in the principal market for the issuer's common stock and in the market where the purchase is effected
	Repurchase Price	The issuer does not bid for or purchase its shares at a price that is higher than the highest independent bid or last independent transaction price, whichever is higher, quoted on the consolidated system
	Disclosure Period	Quarterly disclosure of all issuer repurchases of shares or other units of any class of the issuer's equity securities that are registered by the issuer
	Disclosure Content	Issuers are required to report the total number of shares (or units) purchased (reported on a monthly basis), the average price paid per share, the total number of shares (or units) purchased as part of a publicly announced repurchase plan or program and the maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs
	Disclosure Authority	Securities and Exchange Commission (SEC)
France	Repurchase Period	No later than 15 days before results announcements or if in possession of non-public information
	Repurchase Volume	25% of the average daily volume traded in the month preceding the month of public disclosure of that program and fixed on that basis for the authorized period of the program
	Repurchase Timing	No purchase may constitute the opening or closing transaction of the current trading day
	Repurchase Price	The purchase price is lower than the higher of the price of the last independent trade and the highest current independent bid on the trading venues where the purchase is carried out
	Disclosure Period	Within 7 days after the repurchase day and disclose monthly to the public
	Disclosure Content	-
Disclosure Authority	Commission des opérations de bourse (COB)	
Germany	Repurchase Period	-
	Repurchase Volume	-
	Repurchase Timing	-
	Repurchase Price	-
	Disclosure Period	Monthly
	Disclosure Content	The management board is required to inform the shareholders during the next shareholders' meeting of the purpose of the acquisition, the number of shares acquired, the amount of the share capital that they represent, the proportion of the share capital that they represent, and the purchase price of the shares
Disclosure Authority	Bundesaufsichtsamt für den Wertpapierhandel (BAW)	
Sweden	Repurchase Period	Firms may not engage in trading in their own shares during the 30 days prior to the publishing of interim reports
	Repurchase Volume	The company may not purchase more than 25% of the average daily volume traded in the month preceding the month of the public disclosure of the repurchase program
	Repurchase Timing	No repurchase can take place in the last 30 minutes of the trading day
	Repurchase Price	The company may not purchase shares at a price higher than the higher of the price of the last independent trade and the highest current independent bid on the trading venues where the purchase is carried out
	Disclosure Period	All trades, with information on the number of shares repurchased and average price paid, must be reported to the SSE
	Disclosure Content	-
	Disclosure Authority	Stockholm Stock Exchange (SSE)

Switzerland	Repurchase Period	10 days before earnings announcements or the release of any price-sensitive information.
	Repurchase Volume	Issuer must not, on the regular trading line, repurchase more than 25% of the shares' average daily trading volume (based on the daily volumes of the last 30 trading days on that trading line)
	Repurchase Timing	The issuer must not place repurchase orders during the opening and closing auctions, nor during the auction performed after a "stop trading"
	Repurchase Price	The premium paid on a second trading line should not exceed 5% of the price prevailing in the stock market at the same time
	Disclosure Period	On the first trading day after the end of the offer period, the issuer must report the total number of shares repurchased in each category and disclose them every 10 trading days
	Disclosure Content	-
	Disclosure Authority	The Swiss Takeover Board (TOB)
Spain	Repurchase Period	-
	Repurchase Volume	In an amount, up to 25% of the average daily trading volume in its stocks
	Repurchase Timing	-
	Repurchase Price	Price not higher (lower, in case of sales) than the highest (lowest, in case of sales) independent published bid or last independent transaction price
	Disclosure Period	Companies have to notify the Stock Exchange of all repurchases that represent at least 1% of the firm common stock before seven days following the repurchase
	Disclosure Content	-
	Disclosure Authority	Madrid Stock Exchange
United Kingdom	Repurchase Period	Companies are not allowed to buy back shares during periods when officers and directors are not allowed to trade in their company's shares. In practice, this means that share repurchases are not allowed in the 2-month period preceding the publication of annual earnings or semiannual earnings and in the 1 month before the publication of quarterly results.
	Repurchase Volume	-
	Repurchase Timing	-
	Repurchase Price	Not more than 5% above the average of the market value of those shares for the 10 business days before the repurchase is made
	Disclosure Period	According to UK Listing Rules, once repurchases are made, these too must be reported to the UKLA as soon as possible or no later than 7:30 AM on the following business day.
	Disclosure Content	The report must include the date of purchase, the number of equity shares purchased, and the highest and lowest purchase prices in a day.
	Disclosure Authority	Financial Services Authority
Italy	Repurchase Period	-
	Repurchase Volume	The daily volumes do not exceed 25% of the average daily trading volume registered on the six months preceding each relevant trad
	Repurchase Timing	-
	Repurchase Price	The purchase price should not be higher than the last price of the day before
	Disclosure Period	Monthly
	Disclosure Content	-
	Disclosure Authority	Commissione Nazionale per le Società e la Borsa (Consob)