

The Pennsylvania State University  
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School of Labor and Employment Relations

**VARIETIES OF CAPITALISM AND ORGANIZATIONAL ECONOMIC DEMOCRACY: INSTITUTIONAL  
COMPLEMENTARITIES AS THE DETERMINANT OF EMPLOYEE'S FINANCIAL PARTICIPATION**

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by  
Amar S. Chauhan

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The thesis of Amar S. Chauhan was reviewed and approved\* by the following:

Elaine Farndale  
Assistant Professor of Human Resource Management  
Thesis Adviser

Ryan Lamare  
Assistant Professor of Labor and Employment Relations

Sarah Damaske  
Assistant Professor of Labor and Employment Relations

Paul F. Clark  
Professor of Labor Studies and Employment Relations  
Director of the School of Labor and Employment Relations

\*Signatures are on file in the Graduate School.

## **Abstract**

In this study I analyze the determinants of a firm's use of financial participation schemes. I take an institutional approach toward studying this phenomenon. There are many known, through past research, micro determinants of financial participation and what I wish to find through my study is that whether it is the contextual nature of incentives comprised of political economic institutions of the country and the firm's characteristics which determines the use of financial participation schemes by a firm.

I build upon five models of capitalism as the different set of contexts given to firms operating in countries falling under one of those models. The individual characteristics that are used as explanatory variables are capital intensity, age and size of the firm, Influence of trade union on the employment relations and presence of Joint consultative committees or work councils. The dataset used for this study is a survey done over 4253 companies by CRANET network. Financial participation schemes are divided into two groups first of which consists of stock options, employee share schemes, individual bonus and performance based pay and second of profit sharing and group based bonus. Based on the analysis in this study I found that the hypothesized order of expected value of that relevant financial participation schemes are used by a company, given the type of capitalism under which it operates, is not supported. A different pattern does emerge however and hence makes it desirable to study this phenomenon more analytically before doing further empirical research. Further, of the firms characteristics tested Capital Intensity and size are found to be positively related to scale 1 and trade union's effect is found to be negatively related to scale 1 while the stakeholder's based governance model positively related to scale 1.

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## Introduction

Financial Participation has typically been viewed as an instrument that motivates employees to work towards the same goals as those of the shareholders, thus alleviating the moral hazard problem. However, in recent times financial participation has been looked upon as a way of communication between shareholders and workers (Guery 2013). Employee financial participation schemes can be broad based or may only be aimed at managerial employees, or they can be in the form of profit sharing schemes and equity based schemes. Profit sharing is seen as direct participation of workers in the firm while equity based schemes are linked to firms' effort to align the long term interests of their workers' with companies' goals (Crouch et al. 2010; Cin et al. 2002). The financial participation schemes might help in solving free rider problems in the firm because workers face a repeated game with the firm and hence commit themselves to the company's long- term success (Kato and Morishima 2002).

There is ample research evidence that suggests that the employment relation practices of companies vary as per context described by variety of capitalism of the country. The "neo-institutional theory" suggests that companies need to achieve *legitimacy* and they do so by aligning their strategies according to the context (Poutsma et al 2012, p. 1517). For example, Farndale et al. (2008) found significant differences in HR practices including financial participation within the coordinated market economy group as described by two-way varieties of capitalism approach. Therefore I expect the financial participation practices of companies to vary according to the context defined by the market in which they operate.

The varieties of capitalism approach, pioneered by Peter Hall and David Soskice and extended further by Bruno Amable, is a framework for describing comparative political economies on the basis of "*strategic interactions*" between the different institutional players in the economy. Hall and Soskice (2001) classified the developed economies into liberal

market and coordinated market economies and Amable (2003) extended the analysis further by grouping economies into five clusters on the basis of five broad political economic institutional dimensions: product markets, labor markets, financial markets, social protection and education structure. Keeping this classification of capitalism at the center of my analysis, I wish to explore how financial participation practices vary among firms in countries classified by their model of capitalism based on institutional complementarities and question whether there is a causal relationship between the two. Further, past research over the years have tested and found that the firms' characteristics such as presence of work councils or of trade union also have a statistically significant effect on the financial participation schemes used by companies. Therefore, it is imperative that firms' characteristics are controlled for and also regressed upon to see whether our data is consistent with expectations built upon the theory developed over the years regarding these characteristics. I will use survey data from 21 countries to test the theory that I build in my study. The data is collected by CRANET network to help research studies in comparative HR. I will assign each survey unit to one of the five models of capitalism using its country as the proxy for the capitalism. Then I will control for firms' characteristics using data about individual unit to use them as control variable and then as explanatory variables.

### **Approach of Study**

Every country has its own set up of political-economic institutions that collectively shape the market (or non-market) mechanisms of the country. A country's political and economic institutions shape a firm's preferences and constraints, thereby affecting behavior. For instance, Pastor (2013) claims that a firm's preferences in Austria, given the country's institutional setup, encouraged businesses to oppose the Austrian Government's plan to cut social policy, which is unlike some other European countries where companies opposed the "social partnership" based institutional structure.



Institutions have effects on a firm's behavior but they cannot be thought about in isolation. Rather their effects should be studied as a combination of institutions because each of them has different effect on variables depending upon the context formed by its combination with other institutions (Ostrom 1986; Hopner 2005). Most studies classify environments in which firms work on the basis of a broad "Varieties of Capitalism" (Hall and Soskice 2001). Under such classification there are Liberal markets such as the United States and Coordinated market structures, such as Germany and France. The primary difference in this classification is whether the Economy is guided by market based mechanisms, such as free market economy of United States, or a non-market coordination mechanism in which different institutions such as financial markets or industrial relations in their markets affect the equilibrium choices (Hall and Soskice 2001; Amable 2003). But there are many markets, such as Italy or Sweden, that are situated in between these two paradigms. Therefore, to further analyze how a firm's behavior is affected by its market environment, it is more suitable to parse the varieties of capitalism into relevant institutional and structural combinations for each characteristic of the economy.

Amable (2003) defines the domain of a firm's political economic environment over key institutions as variables: product markets, labor market structure, financial markets, social protection and education system. Setting these variables as the key domain variables gives a broader and more lucid range of varieties of capitalism, which is more explanatory than a narrower Coordinated versus Liberal Market Economy classification as it presents a detailed analysis of institutional effects in the context of combinations of institutions with which it is applied. For instance, the structure of education in a country should be considered along with a firm's relationship with banks, because there may be interaction effects on levels of investment in benefits and training. Popov (2014) surveyed 8265 firms and found that availability of bank credit may affect a firm's investment in "on-the-job training" and this

effect is empirically found to be around fifteen percent drop in the probability of training provided by a firm that is “credit constrained” (Popov 2014).

Further, studying a firm’s response strategy in light of a single institution, while holding others constant, might not help in clearly understanding the effect of that institution on the firm’s actions. For example, it has been assumed that centralized bargaining would lead to higher wages, but past research has proved a “hump” shape relationship between wages and degree of centralization, i.e. totally market-based settings or totally coordinated structures will both put constraints on wages (Calmfors and Defill 1988). Amable (2003) explains how one institution can affect the working of another. For instance, a company’s relationship with its creditors can promote long term investment and thereby providing the opportunity to stimulate stable labor relations.

Thus generalizing the effect of an institution without taking into account the effect of “complementary” relationships with other institutions is meaningless. Hence I will categorize political economic institutions into the five categorical variables described above to see how different combinations of these institutions affect the financial participation strategies of the firm. The primary goal is to see how economic democracy within the firm changes as the constraints on the firm’s behavior change in their complimentary composition. I will test how the use of financial participation instruments by a firm changes according to the variety of capitalism under which it performs controlling for firm’s individual characteristics and then also see how these firm level characteristics affect our independent variable.

In the following sections the concept of financial participation is elaborated followed by five main institutions of a political economy, concluding with descriptions of five basic varieties of capitalism and how I expect the financial participation strategies to be in each model.

**What is financial participation?**

The rationale behind financial participation among workers lies in the unarguable failure of communist way of solving the problem of property rights related to how to incorporate people into the productive economic participation in civil society. In 1958 American Lawyer and Investment Banker Louis Kelso proposed the alternative solution in which owners are not to be deprived of their property while non-owners should be incorporated as shareowners (Lowitzsch 2009). Economists such as Milton Friedman regard “freedom” as the highest good and claims that “competitive capitalism...as a system of economic freedom.....[is] a necessary condition for political freedom”(Friedman 1982; Ashford 2010).

Kelso proposed an alternate theory of “Binary Economics” that claims that capital not only affects the growth as a means of production but it also has a relationship with growth through the distribution pattern of capital in a democratic free market economy. The strength of his theory lies in the fact that it does not imply transferring property rights from rich to poor. Rather, it supports making credit available to everyone while not socializing the market-based mechanism of private property. In a sense it can be linked to allowing individuals an opportunity to make a leveraged buy-out of productive capital, which in turn will make a higher use of excess capacity by creating a higher consumption demand caused by wider capital ownership (Ashford 1992; D’art 1992), that usually resides in the capacity of highly capitalized firms (Ashford 1996). This system claims to provide higher employment and more productive use of capital in the longer term by providing a wider distribution of the productive capital (Ashford 2010).

### **Forms of Financial Participation**

As per the “The European Foundation for the Improvement of Living and Working Conditions” report compiled by Poutsma (2001) Financial Participation schemes can be summarized as the following types:

## 1. Participation Through Profit Sharing

These are usually structured schemes that give employees a reward that is a variable, based on a company's result or profitability and it differs from traditional bonus schemes in that it is directed towards a collective group of workers, whereas a bonus is sometimes awarded on a more individual basis. Further it is different from gain-sharing in that gain-sharing is a cost reducing activity but a profit sharing activity. There can be profit sharing in the form of share awards that are based on a company's profit measure. Also, there are long term savings plans such as defined contribution plans.

## 2. Participation Through Share Ownership

This form of financial participation is different from profit sharing in that it is not directly linked with profits but indirectly related to the present value of future profitability. These plans can take the form of general equity shares or of employee stock options which have become quite popular in market economies in the past few years. Options give employees more discretion. Usually companies issue these shares from a prescribed quota of shares reserved specifically for company employees at a discounted price. One common element of the legal regulations regarding Employee Stock Options Plans (ESOPs) is that prohibit discriminatory behavior by the company ([cog.kent.edu/lib/Poutsma/Poutsma.htm](http://cog.kent.edu/lib/Poutsma/Poutsma.htm)).

Profit sharing is generally seen as a benefit plan whereas Equity based plans are generally viewed as an HR and Corporate Finance tool in that it creates an internal market for the stock as the fund can be used to repurchase stock from shareholders. If the increase in the employees' productivity results in higher profits, the transfer of benefits to the employees will depend upon whether the company will be able to afford higher contribution in the plan the following year. On the other hand, an ESOP would have transferred these benefits automatically through the increase in the company's stock value. Further, the fund for profit sharing plan cannot be used for reinvestment, under the ERISA act, in the company whereas

the ESOP funds are readily available for reinvestment in company's business. Another important benefit for the company is that debt financing through ESOP route, which is a loan taken by ESOP fund and reinvested in the company through stock purchase, is tax deductible and hence can reduce the debt repayment cost by a significant amount. The major concern against the use of ESOP is the market risk of decline in company's stock value itself. However, there is room for buying a hedge because ESOP can use up to 49 percent of fund for investing in outside investments (The Menke Group).

### **Empirical evidence from past research about Financial Participation's Benefits**

In recent years Financial Participation of employees is increasingly supported by Political Governance organizations such as the European Union as an instrument for providing broader distribution of productive capital and sustaining employment and by corporations in different countries (Poutsma 1999). Among the market economies, the United States uses employee financial participation as a voluntary strategy of companies whereas the European Union tends to promote it as a policy (Remus 1983).

Numerous studies have found positive links between employee ownership and financial participation and labor productivity. Palcic and McCarthy (2012) found employee share ownership to promote labor productivity in their case study of a "Large Scale" ESOP scheme in Eircom: a national telecom operator. In a more extensive study that include 27 cases studied for productivity Kruse and Blasi (1995) found evidence that ESOP and other forms of employee ownership served to enhance productivity by 6.2 percent on average for ESOP vs non-ESOP firms, and they further found that the difference between labor productivity before and after ESOP offerings could be expected to be 4.4 percentage points. They found that in the United States employee ownership plans have various purposes for management. One of their uses could be to prevent a hostile takeover; as Blasi and Kruse say, "they may have functioned as a takeover defense in public defense in public companies

in 5 percent of cases.” Moreover, in 25 case studies of employee behavior, which include longitudinal analysis, a positive relationship was found between employee ownership and organizational commitment (Blasi and Kruse 1991; Kruse and Blasi 1995).

A similar result about productivity is found by Jones and Kato (1995) for Japanese firms using ESOP as a means of employee ownership, who interestingly did not receive any tax incentives to use them. Further, they found evidence through this panel data that stretched over eight years for 109 unionized and large manufacturing companies that suggested profit sharing to increase the positive effects of ESOPs. Ya-Ting (2003) also found a similar percentage of gains from using ESOPs for 131 Taiwanese electronics firms.

Dunbar and Kumbhakar (1992) found that ESOPs in no way negatively affect efficiency and that they might need other supporting forms of participation to realize their full potential however. Similarly, Pendleton and Robinson (2010) showed empirically that in some instances the effects of stock plans diminished relative to the proportion of employees covered. In their words, “When a large proportion of employees participate in the plan, the influence of ownership transcends the need for further involvement in other practices” (Pendleton and Robinson 2010 P. 23).

Blasi et al. (2008) formally proved that employees in firms with the “most progressive employment relations work practices” may give less priority to balance the risk in their portfolio which increases with the ownership of stocks in their firm. For instance, in the major instances of failure of ownership schemes such as that in the case of United Airlines, bad employment relations practices are one major reason why it never worked out (Blasi et al. 2008). “ Two clear implications are that: 1) the structure of employee ownership and profit sharing plans needs to be “fit” to the risk profile of the workers; and (2) portfolio diversification can be generally consistent with shared capitalism.” (Blasi et al. 2008 P24)

Extending this logic of workers' portfolio-risk further Markowitz et al. (2008) derived the optimal stock holding in the company stock as 8 and 2/3 percentage of their diversified portfolio. It further seems to be correlated to the other employees' share in company stock to alleviate the free rider problem and the probability of bankruptcy for the company. In summary, firms with progressive employment relations practices will have their employees' weigh the utility loss through increased risk less than they do in the absence of such corporate culture, and thereby extracting a better value out of employee ownership. Hence, companies with better governance need to be more cautious about more than optimal stock holding by employees compared to their portfolio risk (Markowitz et al. 2008; Blasi et al. 2008). Research has also found benefits of profit sharing for both firms and workers. Workers' performance is affected by their perceptions about the legitimacy of the firm's capital (Akerlof 1982). Akerlof (1982) proved a sociological model fits the firm-worker wage relationship better than a standard neoclassical approach because the utility of *gifts* exchanged between firm and workers is directly related to the norms of exchange. Hence, financial participation can be viewed as capitalist's effort to introduce legitimacy about the capital (Croucher et al. 2010).

### **Past research about determinants of financial participation**

The majority of past research has focused on studying the institutional effects on Financial Participation practices either by studying it unilaterally or at maximum classifying two broad types of capitalism: Liberal Market Economies and Coordinated Market Economies.

Varieties of capitalism and their effects on Industrial Relations policies have not been researched extensively. Farndale et al. (2008) studied this effect on the two way classification of capitalism - Liberal market (LME) versus Coordinated market economies(CME) pioneered by Hall and Soskice (2001)- and found that differences between employee financial

participation practices have less variation in LME than those in CME while controlling for size and sector. Moreover, differences are also found in the use of share options and profit sharing between foreign-owned and domestic-owned MNCs and other organizations. I think it is further possible to analyze it into a broader framework of five models of capitalism that captures more clearly the diversities in the capitalism models.

In their exemplary work Poutsma et al. (2006) used dummies for countries, Information technology firms and for services firm and thereby capturing institutional effects but missing complementary relationships present in varieties of capitalism literature and under which these IT or services firms operate. For instance, it will be interesting to see whether indirect participation affects the broad based equity schemes in Information technology firms in Germany as in Finland because both the countries fall under different types of coordinated market economic model. A significant relationship between direct participation and share option schemes is not found and share acquisition plans are found to be directly related to countries. This suggests that there may be institutional motivation for using such schemes.

Jones et al. (2006) analyzed unbalanced panel data of 799 publicly listed Finnish firms (with and without NOKIA which accounted for more than 50% of HEX value) and tracked down some specific sources as significant factors in use of stock options such as increase in equity capital, development of stock market, etc. The result is consistent with the fact that agency problems are related to the use of options schemes to make up for monitoring costs. They used the multinomial-logit estimation with variables such as “Market value per employee, Human Capital Intensity, Risk and Foreign ownership” and found the impact of foreign ownership to be statistically insignificant, even as market value per employee was significant while acknowledging that foreign ownership is affected by institutional context.



Therefore, we now wish to see how configurations of political-economic institutions affect the usage of financial participation schemes by firms.

In the following sections I will briefly describe the variables on which classification of capitalism is based followed by introduction to the classification itself. Analyzing the relevant firm's characteristic as follow up I will then build the hypothesis based upon the expectations developed regarding financial participation strategies based upon the theory.

### **Models of Capitalism**

Based on Amable's (2003) classification the variables of the economy that are taken as dimensions for the basis of classifying the institutional set up of the country are: Product market, Labor market, Financial markets, Welfare policies and Education system. These are explained with their expected effects on firm's financial participation strategies in detail below.

i) **Product Markets:** Markets where firms compete to sell their products or services are product markets and they can be competitive, monopoly or oligopolistic markets based of density of firms competing with each other (Varian 2010). Product markets can affect compensation structure. For instance foreign competition impacts wages in markets that are concentrated compared to those that are competitive (Borjas and Ramey 1995). Funk and Ried (2003) did a panel data analysis and found a statistically significant positive relationship between product market competition and strong incentive based compensation schemes. Product market competition enhances performance related pay, and the result holds for stock options (Cuanat and Dualupe 2004). In fact there is a convex relationship between product market competition and incentive of managers with "strength" of schemes increasing with competition (Beiner et al 2011).

ii) **Labor markets:** A Labor Market Area can be defined as, "an economically integrated geographic area within which individuals can reside and find employment within a

reasonable distance or can readily change employment without changing their place of residence" (Woodward 2011 P. 30). There is some research that seems to suggest that coordinated wage bargaining decrease the wage inequality created by performance based incentives (Barth et al 2012). Industry level bargaining might have been able to keep variance effect in the variable pay schemes through bonus pay schemes substituting for profit sharing awards. (Arrowsmith and Marginson 2011) Hence coordination in the labor market affects incentive based pay. One interesting fact to note is that coordination of wage bargaining, unlike the degree of centralization, may negate the negative effects of a trade union, which is ascribed to a great extent to non-flexibility in organization size that unions promote, on attractiveness of a market to foreign direct investment (Radulescu and Robeson 2008). Further, work-councils are found to have greater impact in "productivity-enhancing" activities as compared to "rent-seeking" activities in firms that are covered by a coordinated centralized bargaining when compared to those that are not (Hubler and Jirjahn 2003). Hence wage bargaining and labor market policies can have effects on incentive schemes in relation to other institutions. (Traxler et al. 2008)

iii) Financial Markets: The financial markets can be defined as the market for exchange of funds and can be further classified into capital markets, which facilitates exchange of stocks and bonds or money markets, which facilitate exchange of debt or financing (Varian 2010). The degree to which institutional investment in the firm comes from family or bank funds has an effect on incentive based compensation. The proportion of institutional investors positively affects the variance based pay of managers while inversely affecting the basic level of compensation (Hartzell and Starks 2003). The variable component of pay is found to be directly related to firms' capital structure and to be particularly high in firms having high convertible debt. Out of variable pay components, stock options are the "highest sensitivity to a firms' capital structure" (Molina 2007, p. 21). Also, if the equity

ownership is less concentrated, there is no coordination problem in monitoring performance, and hence incentive based pay is less ascribed (Jones et al. 2006). In liberal market economies such as those in the USA and UK there are short term pressures from institutional investors, as opposed to the financial markets of Japan or Germany; hence such firms might not opt for financial participation schemes such as a “pension fund ” because shareholders resist sharing financial rights as opposed to stakeholder rights (Poutsma 2012). Overall if the firm is active in market finance then I expect more employee stock options, whereas centralized financial systems support more risk averse participation schemes.

iv) Social Protection: National welfare systems usually evolve out of country specific politics. For instance, countries like US or Canada have less social expenditures as a percentage of GDP when compared to countries like Sweden or Austria (Amable 2003). In some countries, such as the US, there is a lack of social welfare for workers compared to countries such as Spain or Sweden which follows different varieties of capitalism. Hence use of stock options, which gives an option to buy the stock at a strike price after the due date, might be more observed compared to share ownership schemes because employees’ long term interests have to be more aligned with company profitability than in some other market economies such as Greece, which promotes strong welfare schemes for citizens (Amable 2003). Therefore it will be interesting to see whether social protection plays a key role in the results or not. However, I have not been able to find an empirical result from past research or draw a formal theory for studying this effect. As such, I will avoid slipping into causal language at least until the later parts of my thesis where we would have empirical results to extend the analysis.

v) Education: The education system of a country can be thought of as differentiated or standardized. In countries like Germany it is highly standardized and less differentiated, whereas in the USA it is the other way round (Amable 2003). However, a

clear link between education system of a country and use of financial participation schemes by companies has yet to be proven. While education structure can affect the companies' investment in training of employees, there is no empirical study (as per my knowledge so far) that suggests that it may or may not promote specific form of financial participation. Therefore, I will not consider the country's education system while considering the effect of institutional complementarities over financial participation.

On the basis of Principal-components analysis and cluster analysis, Amable (2003) analyzed each of the five domains in the economies of 21 developed countries. For instance, in the Labor market category, it is possible to have 5 clusters which are classified by the level of employment protection, industrial relations and employment policy of the countries. Doing the same analysis for all five domains it is possible to consider the complementary relationships and divide Capitalism into 5 clusters.

These dimensions, which form the foundation of a cluster, then collectively define the institutional environment that affects the financial participation strategy of the firm. Thus, it is imperative that instead of analyzing their effect as an independent dimension their effect is analyzed as a particular combination of each of these dimensions. In the next section the expected combined effect is drawn by pulling all these together to draw a particular model of an economy.

Following the same terminology I will now describe the five models of capitalism which form basis of our analysis. These five models are: The Continental European Model, State Influenced Coordinated Market Economies, Scandinavian Social Democrat Model, The Asian Model and The Liberal Market Economies.

- 1.) The Continental Europe:** Germany, France, Austria, Belgium, Norway, The Netherlands and Switzerland

This model of capitalism is marked by a high percentage of indirect employee representation and a significant amount of employee protection. Often the works councils or consultative committees act as employee representing institutions. For instance, the employee codetermination system in Germany or Works Councils in The Netherlands gives a considerable amount of control to employees over strategic decision making of the company. Industrial relations are not conflict based, and there is marked difference, compared to that in Liberal Markets, in the approach of managers who follow a stakeholders' approach towards governance (Brewster et al 2007). Also, the banking system is highly developed, and banks have major stakes in corporations with long term credit based relationships with firms. Stock markets are highly developed, supporting equity schemes. Product markets are regulated but still less than those of Mediterranean economies, and specifically less protectionism is witnessed than that is the economic model of Japan (Amable 2003). In a detailed analysis of Austrian firms' support of welfare schemes, Paster (2013) explains how a country's institutional configuration motivated the firms to take stances in opposition to neo liberal policies. The voluntary nature of membership creates an exit threat, where smaller firms will be discontent and threaten to exit; in the absence of such threat, due to compulsory membership, WKO (Austrian Economic Chamber) successfully supported the welfare scheme. Hence this model supports coordination among employers to support the partnership based labor relations.

In this group of economies I expect employee financial participation to be high with more profit sharing schemes than share ownership or stock options. The companies that are expected to have broad based profit sharing schemes are those that are competing in a competitive product and/or labor market, usually domestically owned and whose employees are skillful and have organized workforce (Poutsma et al 2003). In this group of economies product market characteristics, wage bargaining structures, and relationship of firms to

capital markets motivate the use of profit sharing schemes. In these economies employees have strong organized leverage with very strong union influence in bargaining, which is usually organized at the industry level with some room for flexibility at the company level (Amable 2003, Hall and Solskice 2001, ETUI 2003). Moreover, indirect participation promotes profit sharing and most firms might be classified as typical “collectivist” firms who support collectivism in their Employment Relations (Poutsma et al 2006). The capital market relationship between firm and its banks are usually not short term such as that in US and UK (Hall and Solskice 2001). These factors suggest that participation schemes move away from risky assets such as stock options while promoting profit sharing in the form of bonus pay and to a limited extent employee share ownership schemes. The latter may come with a “safety valve” such as those in France where profit sharing is compulsory in companies having more than 50 employees and only 5 percent of private sector companies have equity based plans (ETUI 2003).

## **2.) State Influenced Coordinated Market Economies: Spain, Portugal, Greece and Italy**

This group of economies is marked by high regulation in product markets with Greece having the highest level of administrative market regulation. Also, OECD ranked these economies more strictly than other EU economies in terms of employment protection (Bitzens et al. 2009). In a 2004 survey by the World Bank, Greece averaged 66 compared to the OECD average of 34.4 in a measure of employment rigidities for companies. There is a high firing cost for Greek employers, “the firing cost in Greece was 133 weeks whereas 40 weeks for OECD average” (Bertola et al 2000, p. 67). The relationship between managers and workers is typically conflict based (Amable 2003). Unions formalized their bargaining models in wake of pressures from EU constitution and thereby prevent the decentralization of wage bargaining structure. As Romo (2005, P. 18) states, “The unions wanted to rationalize

the distribution of tasks between the different levels and loci of negotiation and hence avoid permanent renegotiation as well as informal decentralization. The employers, by contrast, did not want to modify the collective bargaining system, even though it was very conflict-prone because 1994 reform provided them with a strong instrument to perpetuate the structural weakness of the unions, allowing employers considerable freedom to determine working conditions unilaterally.” Therefore trade unions agreed upon less strict rules regarding relieving an employee from the job while retaining the collective bargaining system that allows them to negotiate long term contracts (Romo 2005).

The economies’ financial systems depends less on market-based mechanism than those of Liberal market economies and have lesser percentages of institutional investors compared to pension funds or insurance companies, while bonds are high in percentage terms in the year-end balance sheet (Amable 2003). In this institutional configuration I expect high indirect participation for employees and high value placed on risk aversion. For example, In Italy private pension payments could be processed by specified financial intermediaries supervised by a commission which in turn is *directed* by Labor ministry, which also supervises the pension funds, and ministry of the Treasury hears consults the commission before issuing regulatory directives (Georgio et al. 2000).

In this model of capitalism I expect to see the lowest levels of market based schemes in the portfolio of financial participation or *incentives*. Wage bargaining in Spain is at the sectorial level which makes it less centralized than Sweden or Austria but more than that in France or the UK (Royo 2008). However, modernized Spain still carries some institutional framework of influence from state and hence can be classified as “State Influenced Market Economy” (Schmidt 2006). Product markets are less competitive than LMEs or CMEs (Continental European model), and financial markets in these countries are underdeveloped as a result of state intervention (Amable 2003). Hence I expect the incentive schemes to be

less related to market based risk, which stock options usually are (Jones et al. 2006). The most interesting thing to note however is that although sectorial-level wage bargaining makes them less centralized than France and Sweden, the employers have not called for deregulation of labor markets under pressures of financial crisis or globalization and instead called for more cooperation at the plant level (Royo 2008). This is attributed to the fact of institutional complementarities in these economies: State influence is still present in different dimension of economy even though the labor market is more deregulated than the Swedish or French economy (Crouch 2005, Schmidt 2006, Royo 2008). Employment protection and severance package are higher than other models of capitalism (Amable 2003).

Although there is high indirect participation which is directly correlated with profit sharing (Poutsma et al. 2003), there has been substantive evidence for decrease in performance based pay incentives under high government regulation. The highly regulated markets increase enforced governance and reduce agency cost and thereby allowing companies to spend less on incentive based pay (Dick 2012; Zhaoyang et al 2010). Therefore I expect low levels of profit sharing in terms of financial incentives in this model compared to the continental European model and even lower percentages of market related or equity based schemes.

### **3.) Scandinavian Social Democrat model: Sweden, Denmark and Finland**

These three Scandinavian economies follow a social democratic structure. (ETUI 2003) Sweden has one of the highest levels of trade union memberships in the continent and an estimated bargaining coverage rate of 90%. Swedish firms, with their single tier board system, have employee members (chosen by their unions) on their boards for all companies with more than 25 employees. All three countries have highly centralized wage bargaining structure (Royo 2008). Pay bargaining is usually done at the industry level with high coordination: in Sweden only 11% of wage bargaining was done at local level in 2012, and in



Finland, although the employer's association opposed national level bargaining but retained a coordinating role; in Denmark negotiations are primarily at the company level and only 17% of negotiations were at the industry level ([www.workersparticipation.eu](http://www.workersparticipation.eu)).

The financial markets are found to be slightly different in that the Scandinavian countries have higher bonds as a percentage of investors' year-end-portfolios than those in other economies, except for Greece (Amable 2003). Companies have access to a "patient capital" in the sense that credit availability is not always tied to profits (Hall and Soskice 2001). They are traditional in the sense that importance of securities and bonds as opposed to Liberal market economies is higher (Amable 2003).

However, the key difference that makes this economic model different from the continental European model lead by Germany-France is the degree of regulation in product markets. In the Principal-Component analysis by Amable (2003) the three Scandinavian countries' product markets are found to be significantly less regulated compared to the continental model when compared on the same indicator variables.

The product market competition is directly related to managerial incentive based pay. "With greater competition due to increased product substitutability or a larger market, firms provide stronger incentives to their managers to reduce costs, even though profits become more volatile" (Raith2003; Karuna 2007, p. 284). Past research suggests a positive relationship between product market competition and managerial incentives. Beiner (2011) analyzed 600 observations over the period of 2002-2005 consisting of 200 Swiss firms and used seven control variables that include firm size and market  $\beta$ . He found a convex relationship between product market competition and managerial incentive pay: if the intensity is low then the managerial incentive pay will decrease but under *sufficiently* high intensity product markets managerial incentive pay will increase.

Moreover, While Denmark achieved highest incidence of share ownership schemes among EU countries, it follows a structure of industrial relations similar to Sweden. However, bonds issued to employees are tax exempt and voluntary (Poutsma 2001). In Sweden there are “profit sharing trusts” that are supported by the state but beyond that there is no framework for encouraging financial participation (Wurz 2003). Therefore, in this group of capitalism, which also has high indirect participation, I expect high financial participation based on profit sharing and high use of equity based schemes compared to all models discussed so far.

#### **4.) The Asian Model: Japan and Korea**

In this model of capitalism I witness regulated labor markets where the top priority is protection of employment and union density is high, especially in Japan (Amable 2003). The Financial markets’ relationship with the firm is “credit based” and has a long term objective while government is more inclined to protect successful domestic firms from foreign competition through financial systems (Cerny 2005). Cerny (2005) noted that the success of the Japanese model was due to its ability to resist laissez faire of “Thatcherism” or “Reaganism” and at the same time use that global scenario to expand its own market.

However, product markets are distinct from continental Europe, State Influenced CMEs or Social Democrats, in that the product markets are “governed” but regulated (Amable 2003). South Korea which is cited as the marked example of economic success in the post war third world had an advantage in implementing this model, which notably failed in India (Chibber 2003). Not only did South Korea have the right support system, its alliance with Japan’s export oriented and technologically developed companies helped Korean firms’ knowledge and let Japan use Korean excess capacity. This was required to formulate such a model of Governed social capitalism but also the art to nudge local business’s strategy into one that optimizes application of that particular institutional framework (Chibber 1999).

Chibber (1999) analyzed why the state's authority over the financial market is not a sufficient condition for success of this model: because it was not enough to maintain legitimacy of industrial policy. "A consideration of the circumstances in which Korean policy succeeded reveals why so many other countries failed to make such a switch or even modest switches: Korea was blessed with happy accident of falling within the ambit of Japanese capital's emerging accumulation strategy" (Chibber 1999, p. 42). One other distinction of this model, especially in Japan, is in-built lack of social security and indirect dependence on companies (Cho 1996). In Japanese system of industrial relations care for long term welfare of employees is an important institutional feature.

In this model of economy I have an ambiguous expectation about the use of various types of schemes. While high Research and Development expenses and the lack of social security promotes high financial participation (Haasan and Hoshino 2008), I also expect regulated product markets to restrain the use of exclusive stock options. However, after the recession in early 2000s the dynamics might have changed and Japanese firms are increasingly inclined to use more and more stock options (Ahmadijan 2001) in the process of aligning Japanese industrial relations practices with US based practices. Further, firms affiliated with major banks, given the long term relation between firms and banks, usually have low use of stock options and even less if they have high leverage (Uchida 2006). I therefore expect to see more use of Equity based schemes than continental or Mediterranean countries.

##### **5.) The Liberal Market Economies: US, UK, Australia and Canada**

Liberal market economies are characterized by competitive product markets and flexible labor market policies. Also financial markets are well developed, and the importance of institutional investors is realized. Firms seek to maximize shareholder's value in wake of a threat of takeover if they do not follow that objective (Grant 2010). Also, relationships

between investors and firms managers are built upon shorter term profits as their objective function (Hall and Soskice 2001). In this scenario managers are motivated to use incentive schemes to motivate worker's performance. Moreover, indirect employee representation is less common than in other models of capitalism, and thus I expect a high use of stock acquisition plans encouraged by low percentages of indirect employee representation (Poutsma et al 2006).

In these market based economies, I expect the use of equity based schemes to be highest when compared to other models of capitalism. Indirect participation is lower, Product market is competitive, highly developed financial markets with investor-firm relationships are highly leveraged on short term profits, and there is more stress on maximizing shareholder's value compared to that of stakeholder's view in other models of capitalism. Finally the very low percentage of organized representation for workers is supposed to put no hindrance on use of equity based incentive schemes. However, one interesting theory for use of broad based ESOPs is that firms do not use such plans to provide incentives to mid-level managerial employees but rather to succeed in retaining employees and sorting out their beliefs about prospects of the firm itself and, further, to vary their wages per the market wage rate (Oyer and Schaefer 2005). Hence the flexibility of labor markets might help in increasing the use of such schemes for middle level managers.

One thing to note is that there is no lead that would allow us to compare use of different types of financial participation schemes within an economic model for the last three groups. However, based on the theory I draw the following comparative expectations in the form of hypotheses about the use of financial participation schemes used by the companies under the five different models of capitalism

**Summary Table: Institutional features of five models of capitalism**

	<b>Continental Europe</b>	<b>Scandinavian Social Democrat</b>	<b>State Influenced Mediterranean CMEs</b>	<b>Asian Model</b>	<b>Liberal Market Economies</b>
<b>Financial Markets</b>	Bank Based/Market Based	Bank Based	Bank Based	Bank Based	Market Based
<b>Labor Markets</b>	Coordinated	Regulated	Regulated	Coordinated	Competitive
<b>Product Markets</b>	Regulated	Regulated	Regulated	Governed	Competitive
<b>Social Protection</b>	Corporatist	Universalist	Limited	Low	Liberal

Note: Adapted from Amable, B. (2003). *The Diversity of Modern Capitalism*. New York: Oxford University Press (P. 174-175).

*H<sub>1</sub> : Compared to its usage in other models of capitalisms financial participation based on The Employee Share Schemes, Employee Stock options, Performance related Pay and Bonus related to individual goals is used in highest proportion in Liberal market economies followed by The Asian Model, The Scandinavian Social Democrat Model, The Continental European Model and The State Influenced Coordinated Market Economy Model of Mediterranean countries.*

*H<sub>2</sub> : The financial participation based on The Profit Sharing schemes, and Bonus based on Team Goals are used in highest proportion in Continental European Model followed by The Scandinavian Model, The Asian Model, Liberal Market Economies and The State Influenced Coordinated Market Economies.*

### **Reverse Causality between Firms and Institutions**

Past research has suggested how institutionalism paves the way for convergence. According to this theory companies first adopt their practices as per the context and as few companies emerge successful the others see their practices as the paradigm for success in that context (DiMaggio and Powell 1983; Lavelle 2012). However, there is ample empirical literature that suggests that within a particular context the firm's characteristic play a

significant role in determining the use of financial participation by the firms. Among the most notable studies, Lavelle (2012) for instance found that firms' characteristics play a determinant role in use of financial participation schemes for MNCs in Ireland and Jones et al. (2012) found the same is true in case of Finland where he found a solid link with stakeholder oriented governance model of the firm and use of schemes. Poutsma and Nijs (2003) found the positive relationship with size of the company for the whole European Union.

Further, the firms characteristics cannot be ignored because there have been instances in the past where dependence of a country on MNCs for investment in the country has led to institutional changes and thereby suggesting a reverse causality in some cases (Kwok and Tadesse 2006). Kwok and Tadesse (2006) found in their empirical study of 140 countries over 30 years that the practice of institutionalized corruption tends wither away with FDI investment from developed countries where the corruption generally tends to be minimum.

Similarly, Collings et al. (2008) found that effect of US MNCs investment on industrial relations in Ireland was emergence of a "hybrid" industrial relation system some of whose practices were totally new under the previously established Irish industrial relations system such as preference for ADR and "individualistic" employment relation system. An interesting feature found in the study by Gunnigle et al. (2002b) about home country effects on found that US MNCs showed a stronger home country effect compared to their European counterparts.

But this reverse causal relationship of a particular institutional structure yielding to increased MNC's presence to take a different form depends on bargaining power of each player in the collective choice game. In Ireland for instance the preexisting paradigm of "social partnership" was based on a voluntary understanding between trade unions and political elites and the unions as such have less effective deterrent power compared to those

in countries like Slovenia or Netherlands where they have legally instituted power in wage setting collective bargaining. Thus the strategic choices available to government were in themselves dependent upon the institutional set up preceding the government choice of opting for Neo-Liberal Labor market policies replacing the voluntary “social pact” (Regan 2012). Visser and Hemerijck (1997) analyzed an objective example of this deterrent power available through institutional structure by finding that any policy change related to social-funds that are “co-managed by trade unions and employers” would require union support for implementation. Therefore for the purpose of the research question i.e. to find out the institutional determinants of the financial participation, it is safe to assume the firm as an institution taker but institution setter.

However, the studies that linked financial participation with firms’ characteristics are also conducted in units of analysis falling under same economic model (Lavelle 2012; Jones et al. 2012; ) and, as such, it is not wise to overlook how relevant firms’ characteristic may interact with institutional settings.

In the next section I briefly describe the firm characteristics that have been found to be statistically significant determinants of the financial participation schemes under different settings of research study followed by hypothesis.

### **Organizational Predictors**

Competitive firms are likely to use Financial Participation schemes when they are expected to have a positive impact on their profit seeking activities. There are ample research studies from the past that have showed a link between firms’ characteristics and financial participation. Kalmi et al (2005) in their research of 209 listed firms from The UK, The Netherlands, Germany and Finland found equity based schemes to be positively related to productivity while profit sharing schemes were not found to have similar effect or any complimentary relationship with other schemes which is quite contradictory to normally held

belief that financial participation works best with other forms of participation. They attribute reason for this to the fact that firms under their study were listed firms where sense of ownership is less important and any financial participation schemes are seen as “supplementary” rewards.

Kalmi et al (2012) theorized and found that the formal and institutional norms are critical determinants of financial participation practices employed by firms. For instance, sectorial level bargaining would compel the firm to stick with industry norms. Alternatively, informal norms can be transgressed to have a first mover advantage in the labor markets. Their statistical results showed that firms whose pay determination structure is decentralized are more likely to use share ownership schemes compared to profit sharing but the most critical finding is that when base pay is set at sectorial level the decentralized firm would use variable pay schemes to compensate for the lack of flexibility due to sectorial level pay determination.

Similar to the above determinant, corporate governance model of the firm can also determine the use of financial participation strategies of the firm. The two basic approaches that differentiate the firm’s governance philosophy is stakeholder versus shareholder’s approach. While shareholders target maximizing the equity value the stakeholder’s approach based firm has broader objective that considers value addition to all the parties who have stakes in the organization (Jones et al. 2012; Tirole 2001). The research has provided evidence in favor of the fact that recent trend towards the shareholder’s approach in countries, such as Finland, has contributed in the increased the use of participation schemes (Jones et al 2012; Poutsma and de Nijs 2003). Whereas the contradictory argument theorize that because firms governed by stakeholder’s based approach have less pressure to maximize short term profits and hence can share rewards with their workers (Blair 1995; Levine 1995).



The cost of monitoring is another possible major determinant of financial participation schemes used by companies. As the principal finds it expensive to monitor the agent, the use of incentive schemes will prove to bring that cost down (Dick 2012; Zhaoyang et al 2010). The organic characteristics are also found to be related to the use of financial participation schemes. Lavelle et al. (2012) captured all of them in their research over a survey of MNCs in Ireland. Out of the six factors they define: – “country of origin, age, employment size (Irish and worldwide employment size), ownership structure, trade union recognition and sector” (Lavelle et al. P. 1590), all but *sector* are found to be a significant predictor of financial determination.

Country of origin is said to give the genes for HR practices to MNCs while larger (employee count) companies’ employees have less utility from financial participation schemes owing to the agency cost for employer but empirical studies have found a contrary evidence (Poutsma and de Nijs 2003; Lavelle et al. 2012). Similarly, sector of the competing firm is also linked to use of these schemes. Objectively, sectors with high capital intensity require the companies to align interests of managers and workers with company objectives (Lavelle et al. 2012). Further, new companies need to put more efforts towards aligning long term interests of employees with its own than established firms do. However, they are expected to have equity based schemes more often than profit sharing as early years’ profit is less likely compared to profits in longer term (Lavelle et al. 2012; Pendleton 2001).

### **Hypotheses Based on Firm’s Characteristics**

Age of the firms: Older firms have higher financial ability than newly founded firms and thus have the superior ability to offer profit sharing newly founded firms tend to offer equity schemes for need for cash and long term incentive alignment of people (Lavelle et al. 2012; Pendleton 2001).

*H<sub>3a</sub>: Age of the company is positively related to Financial Participation schemes based on Employee Share Schemes, Stock Options, Performance based pay and Individual bonus*

*H<sub>3b</sub>: Age of the company is positively related to Profit Sharing and Group Based Bonus*

Sector: Lavelle (2012) and Jones (2006) found that publicly listed firms/capital intensive firms have high financial participation rate.

*H<sub>4a</sub>: Capital Intensity Age of the company is positively related to Financial Participation schemes based on Employee Share Schemes, Stock Options, Performance based pay and Individual bonus*

*H<sub>4b</sub>: Capital Intensity is positively related to Profit Sharing and Group Based Bonus*

Size of the company: The connection between size and use of financial participation is the monitoring cost and free rider problem therefore, on the basis of reduced agency costs in regulated economies (Dick 2012; Zhaoyang et al 2010; Lavelle et al. 2012).

*H<sub>5a</sub>: Size of the company is positively related to Financial Participation schemes based on Employee Share Schemes, Stock Options, Performance based pay and Individual bonus*

*H<sub>5b</sub>: Size of the company is positively related to Profit Sharing and Group Based Bonus*

Governance: Shareholder's approach is linked with high equity based schemes whereas stakeholder's based model is found to be linked with high profit sharing (Jones et al. 2012; Tirole 2001; Poutsma and de Nijs 2003; Blair 1995; Levine 1995).

*H<sub>6a</sub>: Stakeholder based approach is negatively related to Financial Participation schemes based on Employee Share Schemes, Stock Options, Performance based pay and Individual bonus*

*H<sub>6b</sub>: Stakeholder based approach is positively related to Profit Sharing and Group Based Bonus*

Trade Union effect: Past research has suggested that indirect representation is highly associated with profit sharing. Further the models of capitalism described in earlier section suggest that broad based profit sharing schemes are expected to be correlated with the presence of a trade union (Kalmi et al. 2005; Poutsma 2006).

*H<sub>7a</sub>: Trade unions' affect is negatively related to Financial Participation schemes based on Employee Share Schemes, Stock Options, Performance based pay and Individual bonus*

*H<sub>7b</sub>: Trade unions' affect is positively related to Profit Sharing and Group Based Bonus*

As I can see, the schemes in the first scale i.e. the shares and stock based schemes are more market oriented than those in second hypothesis which are geared towards generating a more equality in ownership of company's production capital. Hence I seek to know how the five varieties of capitalism are marked by their different attitude towards the goal of using financial participation.

#### **Data and Methods:**

The data that is available to us is collected by The Cranfield Network on International Human Resources (CRANET) through the survey of senior HR managers from 6415 companies over 33 countries during the period of 2008-2010. The units of observation are organization. As the official website describes, "The sampling frames used in each country were designed to produce stratified representative samples (by sector and size) and do so in the main for all the countries involved. However, due to slightly different sampling procedures in each country, (descriptive) analysis of the Cranet data cannot claim to provide a representative global overview. In analysis prospective authors will introduce control variables to overcome possible biases." (cranet.org)

**Table 1a. Cronbach's Alpha for Scale1 dependent variables**

<b>Reliability Statistics</b>				
Cronbach's Alpha	N of Items			
.829	16			
<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Employee share schemes for management	3.84	9.969	.496	.815
Stock options for management	3.88	10.349	.381	.822
Performance related pay for management	3.59	9.641	.495	.816
Bonus based on individual goals for management	3.42	9.791	.464	.818
Employee share schemes for professional	3.92	10.225	.488	.817
Stock options for professional	3.99	10.764	.374	.824
Performance related pay for professional	3.65	9.597	.522	.814
Bonus based on individual goals for professional	3.56	9.515	.538	.812
Employee share schemes for clerical	3.93	10.298	.469	.818
Stock options for clerical	4.01	10.930	.331	.826
Performance related pay for clerical	3.71	9.701	.504	.815
Bonus based on individual goals for clerical	3.69	9.707	.495	.816
Employee share schemes for manual	3.95	10.475	.435	.820
Stock options for manual	4.03	11.058	.305	.827
Performance related pay for manual	3.81	10.220	.371	.823
Bonus based on individual goals for manual	3.84	10.235	.387	.822

**Table 1b. Cronbach Alpha for Scale 2 dependent variables.**

<b>Reliability Statistics</b>				
Cronbach's Alpha	N of Items			
.773	8			

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Profit sharing for management	1.74	3.523	.482	.747
Bonus based on team goals for management	1.63	3.576	.391	.765
Profit sharing for professional	1.80	3.498	.558	.734
Bonus based on team goals for professional	1.70	3.470	.490	.746
Profit sharing for clerical	1.83	3.560	.548	.737
Bonus based on team goals for clerical	1.76	3.528	.491	.745
Profit sharing for manual	1.88	3.772	.474	.750
Bonus based on team goals for manual	1.81	3.759	.386	.763

### Measure of Dependent Variable

The survey questionnaire has response questions in form of Nominal variables for each category of financial participation schemes across four different classes of employees: Management, Professional, Clerical and Manual. It is important to do reliability test before I try to come up with a scale, which is described in the next paragraph, to form an index so as to have a numerical variable for the dependent variable. The result is positive and Cronbach's Alpha is .829 for scale 1 (Table 1a.) response variables with no variable having a score less than .812 and .773 for scale 2 (Table 1b) with no variable having a score less than .737. The Cronbach's Alpha is close to one if all the items measure the same aspect of the issue at hand

and scores above .72 are generally assumed satisfactory for this purpose (Croucher et al. 2012).

Next, in order to measure the different schemes of financial participation used by firms through an index an ordinal utility weight is needed for different schemes. Please note that while assigning these weights I am not classifying a scale of quality but just that of higher interest from the point of view of my thesis. That is, I am most curious to know how financial participation schemes reach to the manual employees compared to managerial employees.

Further, the vast experience and empirical data suggest that the company who will extend their equity based scheme to the manual employees will more often than not do so for employees *higher* in the organizational hierarchy. To start with, the financial participation schemes are divided in two groups. First consists of equity based schemes of Employee Share Schemes and Stock Options and Individualized incentives in form of Performance Related Pay and Bonus Based on Individual Goal/Performance. The second group is based on less “risky” offering which consists of Profit Sharing and Bonus Based on Team Goals. Then frequency of each variable is found and scaled to the total frequency so as sum to one hundred percent and order is flipped to assign highest frequency to financial participation schemes to manual employees followed by those for clerical, professional and management in that order. The weights are assigned in the order shown in table 2. Thus we can see that within each category the highest utility is assigned to schemes that are extended to manual employees followed by Clerical, Professionals and Management in that order. And across the schemes the Stock Options are assigned highest weight followed by Share Schemes, Performance Related pay and Individual bonus.

Similarly for profit sharing and bonus based on team goals following weights are assigned (Table 3).

**Table 2: Weights assigned to response variables for constructing Scale 1**

<b>Weights</b>	<b>Response Variable</b>
015.1869	Stock Option for Manual Employees
012.1495	Stock Option for Clerical Employees
009.1121	Stock Option for Professional Employees
005.1402	Stock Option for Management Employees
011.4486	Employee Share Schemes for Manual Employees
010.0467	Employee Share Schemes for Clerical Employees
008.6449	Employee Share Schemes for Professional Employees
005.8411	Employee Share Schemes for Management Employees
005.1402	Performance Related pay for Manual Employees
003.5047	Performance Related Pay for Clerical Employees
003.271	Performance Related Pay for Professional Employees
002.5701	Performance Related Pay for Management Employees
004.2056	Bonus based on Individual goals for employees for Manual Employees
001.8692	Bonus based on Individual goals for Clerical Employees
001.1682	Bonus based on Individual goals for Professional Employees
000.7009	Bonus based on Individual goals for Management Employees
TOTAL=100	

Again, the logic behind weights is to assign highest probability across each scheme to that which reaches the manual employees followed by clerical, professional and management.

**Table 3: Weights assigned to response variables for constructing Scale 2**

<b>Weight</b>	<b>Response Variable</b>
006.6351	Profit Sharing for Manual Employees
009.4787	Profit Sharing for Clerical Employees
011.3744	Profit Sharing for Professional Employees
013.7441	Profit Sharing for Management
010.4265	Bonus based on team goals for Manual Employees
013.2701	Bonus based on team goals for Clerical Employees
015.6398	Bonus based on team goals for Professional Employees
019.4313	Bonus based on team goals for Management Employees
Total=100	

### **Measures of Independent Variables**

For measuring the effect of the model of Capitalism the country where survey filling unit is based is used as proxy. In all there are 1380 survey respondents from the liberal market economies, 1333 from the continental European model, 780 from the Scandinavian Model, 389 from the State Influenced Coordinated Economies of Europe and 389 from the Asian Model (Table 4a).

**Table 4a. Number of survey units under each model of capitalism**

<b>Model of Capitalism</b>	<b>Total Number of Companies Surveyed</b>
Continental Europe	1333
Scandinavian Social Democrat	780
State Influenced Coordinated	371
Liberal	1380
Asian	389
Total	4253



Size is directly measured by the survey question that asks the respondent to say the total people employed on the company's payroll. The governance system is measured by the presence of work councils or a joint consultative committee in the company. In countries where work councils are not mandated by law the companies with a stakeholder approach towards governance have consultative committees. Response to this question is a nominal variable whose value is 1 for yes and 2 for no. For trade union recognition, its effect is measured by the question that allows respondents to describe the influence, on a scale of 0 to 4, of trade unions on their organizations. So this will be an ordinal variable. Home country and age of the company are measured by straight forward nominal (Country's name) and scale (year of establishment) variables respectively. The sector of the company is measured by two variables: whether the company is publicly listed (which signifies the capital intensity) and which industry does it belong to. Because the capital intensive companies are found to use more equity based financial participation schemes (Jones 2008; Lavelle 2012) I would capture effects through both of these two nominal variables.

Given the continuous nature of the scaled dependent variable, I will be able to apply OLS method. I assigned these companies to one of the five models of capitalism according to the country where the survey unit is located. I wish to explore to what extent each of the financial participation schemes is deployed by the company and whether there is a pattern according to the model of the economy. And further to test the  $H_3$  to  $H_7$ , effects of firms' characteristics, the OLS estimation technique is used with only relevant variables i.e. without accounting for the model of capitalism they fall into so that their effect is clearly discernible.

## **Results**

**OLS results to test  $H_1$  and  $H_2$**  : To avoid the "dummy variable trap" (Gujarati et al. 2012 p. 299) only four dummies are used with intercept representing the benchmark Scandinavian Social Democrats (SSD). Results of the regression are in Table 5a.

**Table 4b. Mean and Standard Deviation for organizational variables**

	N	Mean	Std. Deviation
Total number of employees	3661	4023.78	40188.649
Extent to which trade unions influence organization	3372	1.42	1.190
Joint consultative committee or works council	3366	0.67	0.472
If private are you a PLC?	2301	0.37	0.484
Sector	3454	0.648	0.477
Age of The Company	2647	88.131	153.201
EquityIndividualBonus(Scale 1)	2938	14.951	18.202
ProfitBonus(Scale 2)	3036	27.402	27.804

**Table 4c(i). Bivariate Correlation Table for explanatory variables**

Variable	C.E	S.S.D	S.I.C	Liberal	Asian
C.E,	1				
S.S.D	-.320**	1			
S.I.C	-.209**	.147**	1		
Liberal	-.468**	.328**	.214**	1	
Asian	-.214**	.150**	.098**	.220**	1
Total number of employees	-0.015	0.02	0.016	.056**	0.01
Extent to which trade unions influence Org.	.086**	.286**	0.013	.220**	.256**
Joint consultative committee or works council	.185**	.239**	.188**	.321**	0.022
If private are you a PLC?	0.037	.072**	.136**	.062**	.044*
Sector	-.094**	.058**	.034*	.088**	0.006
Age of The Company	.156**	0.01	.083**	-0.035	.093**

**Table 4c(ii). Bivariate Correlation Table for explanatory variables (...continued)**

	Total number of employees	Extent to which trade unions influence organisation	Joint consultative committee or works council	If private are you a PLC?	ector	Age
Total number of employees	1					
Extent to which trade unions influence organization	.046**	1				
Joint consultative committee or			1			

works council	0.031	.404**				
If private are you a PLC?	0.052*	.062**	.065**	1		
Sector	0	-.067**	.130**	0	1	
Age	0.028	.095**	.061**	.038	.036	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

However, because I am interested in the ordering of the expected value among five models of capitalism relative to each other a Marginal Mean model will make the interpretation of statistics easier. As Cameron and Trivedi quotes, Cameron & Trivedi (2005, p. 333) states, “An ME [marginal effect], or partial effect, most often measures the effect on the conditional mean of  $y$  of a change in one of the regressors, say  $X_k$ . In the linear regression model, the ME equals the relevant slope coefficient, greatly simplifying analysis. For nonlinear models, this is no longer the case, leading to remarkably many different methods for calculating MEs.” The marginal means can be seen in table 5b along-side 95 % confidence interval which helps in analyzing the statistical significance of the difference between marginal means.

We can see that the increasing order of marginal mean is Scandinavian Social Democrat model followed by Continental Europe, State Influenced Coordinated, Liberal and Asian economies in that order. However, the difference between Marginal means of Continental European model is not significantly different from the State Influenced Coordinated markets. While, this ordering might be figured on the basis of differences of  $\beta$  coefficients of the explanatory variables of the five models of capitalism, the constant term in that model (Table 5a) doesn't explicitly captures the mean effect of the Scandinavian Social Democrat Model. Therefore, on the basis of this analysis, I reject the  $H_1$  hypothesis. The ordering of expectations regarding Scale 1 of financial participation schemes is:

Asian economic model followed by Liberal, State Influenced Coordinated markets & Continental European (the difference between their marginal means is not statistically significant at 95% level) and Scandinavian Social Democrat.

**Table 5a. Regression results for Scale 1(based on equity schemes) of financial participation**

Model 1.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	$\beta$	Std. Error	$\beta$		
Constant	4.264*	1.794		2.378	.018
C. E.	4.018**	1.403	.105	2.863	.004
S.I.C.	5.503***	1.726	.105	3.188	.001
Liberal	12.232***	1.921	.204	6.366	.000
Asian	22.528***	1.781	.426	12.649	.000
Total number of employees	8.877e-5*	.000	.049	2.081	.038
Extent to which trade unions influence organization	-.327	.474	-.019	-.689	.491
Joint consultative committee or works council	3.422*	1.079	.085	3.172	.002
If private are you a PLC?	10.964***	.933	.280	11.748	.000
Sector	.471	.918	.012	.513	.608
Age of The Company	.000	.004	-.002	-.068	.946

a. Dependent Variable: EquityIndividualBonus (Scale 1)

b. Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1

F-Statistic: 43.187 of 10 and 1451 d.f. Residual Standard Error: 16.66 on 1462 d.f.

Adjusted R<sup>2</sup>: 0.224

**Table 5b. Marginal Means for dependent variable Scale 1(Equity based scale w.r.t. Five Models of capitalism variables)**

Model	Marginal Mean		Confidence Interval	T	Sig.
	M	Std. Error	95%		
S.S.D.	10.69***	1.25	8.21-13.15	8.49	.000
C.E.	14.7***	.66	13.39-16.00	22.15	.000
S.I.C.	16.19***	1.16	13.89-18.47	13.89	.000
Liberal	22.91***	1.36	20.24-25.58	16.83	.000
Asian	33.21***	1.17	30.89-35.52	28.16	.000

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1

The statistical result for the second financial participation scale which is based on profit sharing and group based bonus are produced in Table 6a, which is OLS findings, followed by marginal means in Table 6b.

The marginal mean table helps in interpreting the results easily. With highest marginal mean Liberal Economic model has the highest probability of scoring high on scale 2 of financial participation. However, its difference from that of Continental European is not statistically significant at 95 % of confidence level. Similarly, the difference in marginal means for State Influenced, Asian and Scandinavian Social democrats is not statistically significant. The ordering that can be formed on the basis of this analysis is Liberal and Continental European models sharing the higher rank than rest of the three economic models who statistically share second rank on the basis of Scale 2.

**OLS results to test H<sub>3a</sub> to H<sub>7b</sub>:** Analyzing results on the basis of regression in Table 7, we can see that age of the company is negatively related ( $\beta=-0.004$ ) to the financial participation scale 1 but is not

**Table 6a. Regression results for Scale 2(based on profit sharing) of financial participation**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	$\beta$	Std. Error	$\beta$		
1 (Constant)	27.682***	2.830		9.783	.000
C.E	11.357***	2.219	.209	5.118	.000
S.I.C	4.833	2.735	.064	1.767	.077
Liberal	13.898***	3.021	.164	4.601	.000
Asian	1.025	2.815	.014	.364	.716
Total number of employees	.000**	.000	.073	2.813	.005
Extent to which trade unions influence organization	-.186	.746	-.008	-.249	.803
Joint consultative committee or works council	1.180	1.701	.021	.693	.488
If private are you a PLC?	1.651	1.465	.030	1.127	.260
Sector	-3.379*	1.446	-.063	-2.336	.020
Age of The Company	-.006	.006	-.027	-1.061	.289

- a. Dependent Variable: ProfitBonus (Scale 2)  
 b. Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1

F-Statistic: 7.578 of 10 and 1463 d.f. Residual Standard Error: 18.29 on 1462 d.f.

Adjusted R<sup>2</sup>: 0.245

**Table 6b. Marginal Means for dependent variable Scale 2 (w.r.t. Five Models of capitalism variables)**

Model	Marginal Mean		Confidence Interval	T	Sig.
	M	Std. Error	95%		
S.S.D.	27.14***	1.99	23.23-31.05	13.62	.000
C.E.	38.49***	1.04	36.45-40.54	36.96	.000
S.I.C.	31.97***	1.84	28.34-35.6	17.3	.000
Liberal	41.03***	2.13	36.86-45.21	19.26	.000
Asian	28.16***	1.85	24.52-31.81	15.15	.000

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1

significant (p-value > 0.1). Therefore we do not accept the H<sub>3a</sub> because the result is not statistically significant. In Table 8, the  $\beta$  is negative in value ( $\beta = .002$ ) and is not statistically significant (p-value < .01). Therefore, on the basis of these results we do not accept the H<sub>3b</sub> that age is directly related to financial participation based on profit sharing and group based bonus.

Capital intensity as measured by sector is found to be positively related with  $\beta$  11.122 and 0.33 respectively. Both coefficients are statistically significant at p-value < .001. Therefore I accept the H<sub>4a</sub> that capital intensity is positively related to Scale 1 of financial participation.

For Scale 2 the effect of being publicly listed is not significant while effect of being a manufacturing firm is negative and statistically significant (p-value < .01). Therefore I reject the hypothesis H<sub>4b</sub> because the results are in opposite direction and statistically significant.

The stakeholder's approach measured by presence of work councils or Joint consultative committees is positive in coefficient ( $\beta = 3.83$ ) and highly significant (p-value < .001). Therefore we reject the H<sub>6a</sub> that stakeholder's based approach is negatively related to

equity based scheme of financial participation. For the second scale it has a positive effect ( $\beta = 0.43$ ) and is not significant with p-value .249. Thus, we do not accept  $H_{6b}$ .

**Table 7. Regression results for Scale 1(based on equity schemes) of financial participation regressed on firm's characteristics**

Model	Unstandardized Coefficients		t	Sig.
	$\beta$	Std. Error		
Constant	15.00***	1.20	12.46	.000
Total number of employees	.0001*	.000	2.192	.029
Extent to which trade unions influence organization	-2.95*	.459	-2.273	.023
Joint consultative committee or works council	3.83***	1.013	10.051	.000
If private are you a PLC?	11.122***	.974	15.527	.000
Sector	0.33***	.809	9.757	.000
Age of The Company	-.004	.004	1.369	.171

**Table 8. Regression results for Scale 2 (based on profit sharing schemes) of financial participation regressed on firm's characteristics**

Model	Unstandardized Coefficients		T	Sig.
	$\beta$	Std. Error		
Constant	36.10***	1.79	32.58	.000
Total number of employees	.0002**	.000	3.14	.002
Extent to which trade unions influence organization	-.459	.690	-0.66	.506
Joint consultative committee or works council	0.43	1.629	0.26	.792
If private are you a PLC?	1.68	1.460	1.15	.249
Sector	-4.06**	1.465	-2.78	.006
Age of The Company	.002	.006	-0.40	.688

Dependent Variable: ProfitBonus (Scale2) Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1  
F-Statistic: 3.49 of 6 and 1468 d.f. Residual Standard Error: 26.876 on 1474 d.f. Adjusted R<sup>2</sup>: 0.01

For the last hypothesis, the effect of trade unions is found to be negative in table 7 and is statistically significant ( $\beta = -2.95$ , p-value < .05). From table 8 the effect on scale 2 is found positive but is not significant ( $\beta = -.459$ ). Based on this we accept the  $H_{7a}$  and reject  $H_{7b}$ . That

is, trade unions have negative impact on equity based financial participation schemes but its not significantly positive on profit sharing and group based bonus.

All of these results can be summarized as a following table:

<b>Hypothesis</b>	<b>Result</b>
<b>H<sub>1</sub></b>	<b>Reject</b>
<b>H<sub>2</sub></b>	<b>Reject</b>
<b>H<sub>3a</sub>: Age of Company is Positively related to Scale 1</b>	<b>Reject</b>
<b>H<sub>3b</sub>: Age of Company is Positively related Scale 2</b>	<b>Reject</b>
<b>H<sub>4a</sub>: Capital intensity is positively related to scale 1</b>	<b>Accept</b>
<b>H<sub>4b</sub>: Capital intensity is positively related to scale2</b>	<b>Reject</b>
<b>H<sub>5a</sub>: Company's size is positively related to scale 1</b>	<b>Accept</b>
<b>H<sub>5b</sub>: Company's size is positively related to scale 2</b>	<b>Accept</b>
<b>H<sub>6a</sub>: Stakeholder Based approach is negatively related to Scale 1</b>	<b>Reject</b>
<b>H<sub>6b</sub>: Stakeholder Based approach is positively related to Scale 2</b>	<b>Reject</b>
<b>H<sub>7a</sub>: Trade Union's effect negatively related to scale 1</b>	<b>Accept</b>
<b>H<sub>7b</sub>: Trade Union's effect is positively related to scale 2</b>	<b>Reject</b>

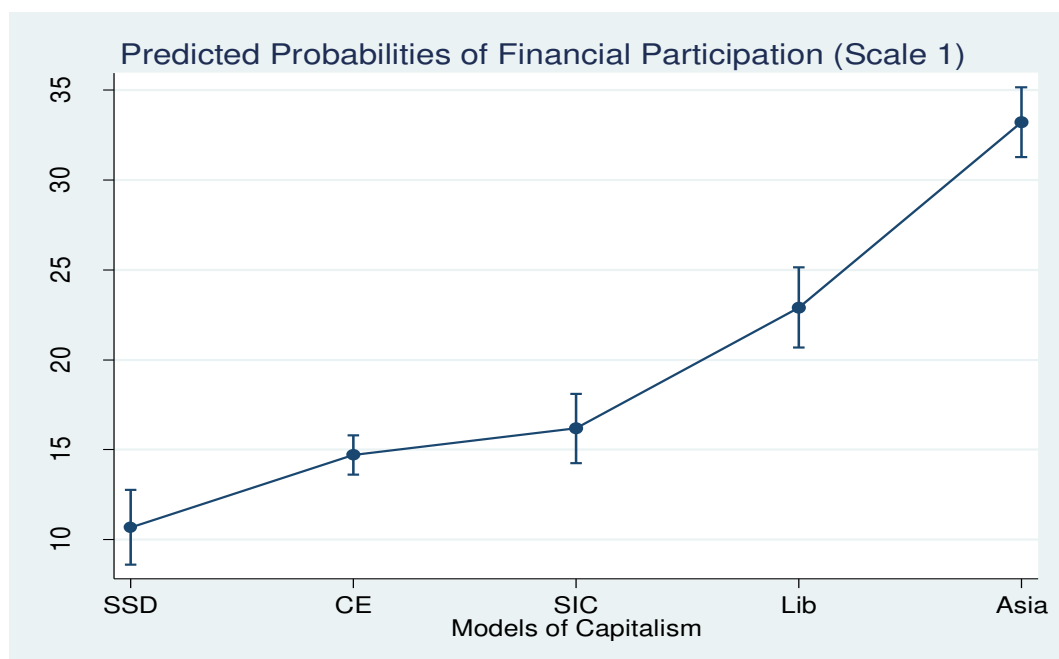
## **Discussion**

Following graph (Figure 1.) makes it easy to interpret the result of analysis regarding first hypothesis. This graph plots the marginal means and their 95 % confidence interval. There is clear increasing order with Scandinavian Social democrat having the lowest marginal mean. The continental European and State influenced markets are not statistically different from each other and then liberal and Asian economies have the higher means with Asian standing highest. What it means is that on this scale which gives high utility to



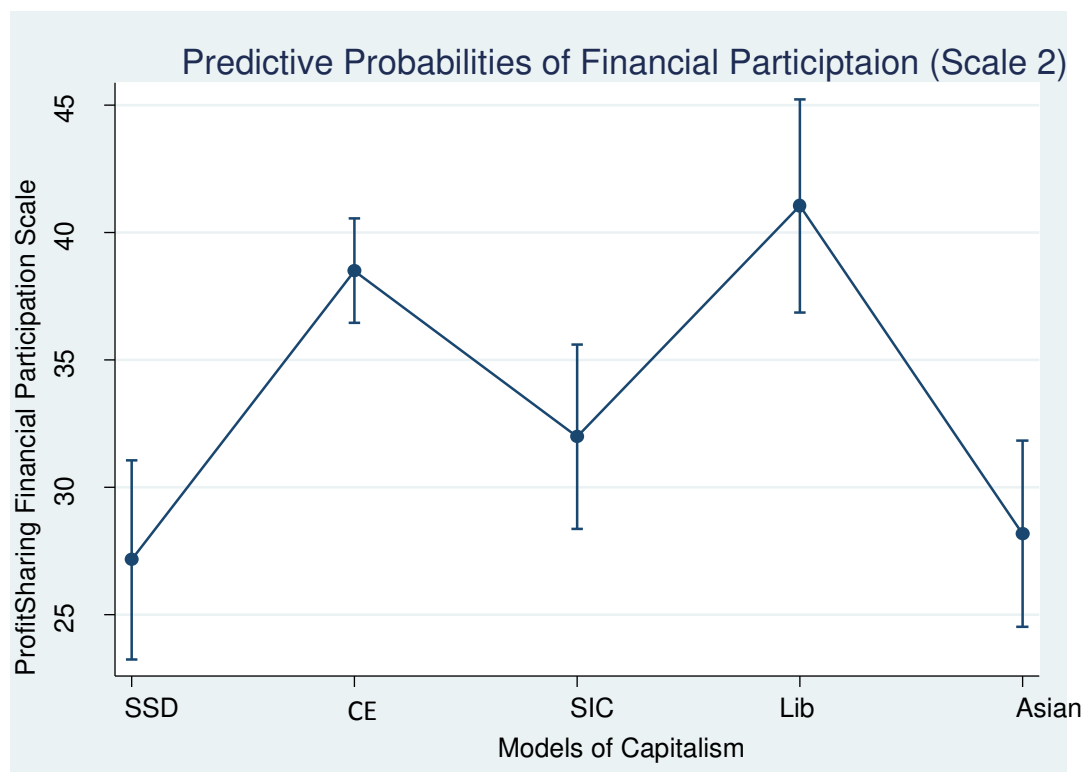
schemes for manual employees across each group Asian economies have the highest probabilities of using those schemes. Theoretically it was hypothesized that Liberal economy group would stand apart followed by Asian.

However, high use of schemes for manual employees makes Asian model stand above every other group (Table 9a-9d). Japan amended its commercial code in 1997 after the economic downturn to allow companies use stock options and their use in present day is more defined agency theory (Hassan and Hossino 2008). In 1988 average worker held 30% of his assets as ESOPs. There are not significant tax incentives but companies give subsidy to their employees for buying company's stock. Further, an employee has to stay with the company to own the stock. The average for a blue collar employee is 20 years and 14000 worth of stock. The Japanese management philosophy is to expect higher employee integration in the company's business processes and thereby increasing productivity and decreasing the cost of collective bargaining (Hassan and Hossino 2008). For this reason I believe regression results are skewed toward Asian model; Japanese firms extend their share schemes to manual employees in a very high percentage compared to those in liberal markets.



**Figure 1. Plot of Marginal Elasticity of Scale 1(w.r.t. five models)**

It was hypothesized that Scandinavian Social Democratic model will have the highest expected value of using these schemes compared to continental Europe and State Influenced markets. The basis of this is that product markets in Scandinavia are less regulated than other two groups and hence will increasingly motivate companies to use financial participation schemes. One main opposing theory to this argument is reverse causality argument which suggests that MNCs would bring home country best practices and try to influence the context of host country and set their own model as the paradigm. Further, yielding to the pressures of globalization and competition home country firms would be quick to adapt their best practices in HR as per the changing context. This more true for some countries such as Ireland and Spain (which belongs to S.I.C. and foreign owned companies are considered important in country's growth) and to small medium enterprises of Germany (Farndale et al. 2008; Clark et al. 2005).



**Figure 2. Plot of Marginal Elasticity of Scale 2 (w.r.t. five models)**

Viewing the plotted marginal means (Figure 2) for Scale 2 the pattern that emerges is that Liberal Market and Continental European firms have higher means compared to rest of the three and the differences in these two groups is not significant. Given the scale weights and frequency tables 10a and 10b the high percentage of companies doing profit sharing contributes more to this result than any other numerical factor. This cannot be because of misclassification of economic models because of visible differences, especially in the labor markets of two models, and because there are differences between the LME subgroups. The motive behind the use of profit sharing plans can be classified into three ways: effort to boost productivity by alleviating the free rider effect, reducing the employee turnover rate and also by increasing within organization information flow to workers (Kruse 1992). It could be the case that liberal and continental European economic context creates a higher need for a micro instrument to have aforementioned effects. Another motivation comes from Long's (2000) finding that there is a negative relationship between grievances and profit sharing.

This also suggests that the expectations posited in this study need a broader analysis of institutional interaction with the theory of firm.

### Cross Tables

**Table 9a.**

<b>Stock Options</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	9.3	19.7	31.3	22	12.5
<b>Professional</b>	3.4	6.3	9.3	15	7.2
<b>Clerical</b>	2.9	3.3	10.3	7.5	7.2
<b>Manual</b>	1.7	2.1	4.1	4.4	5.8

**Table 9b.**

<b>Share Schemes</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	13.5	18.9	24.7	15.5	57.1
<b>Professional</b>	9	10.2	8.1	14.3	51.7
<b>Clerical</b>	8.2	8.2	7.7	11.3	53.6
<b>Manual</b>	6.6	5.3	3.5	9.4	49.4

**Table 9c.**

<b>Performance Based Pay</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	20.8	51.6	67.6	67.3	42.4
<b>Professional</b>	16.8	46.6	58.1	63	31.6
<b>Clerical</b>	16.3	39.3	48.4	54.6	30.5
<b>Manual</b>	15.8	25.2	22	38.2	28.4

**Table 9d.**

<b>Individual Goals Based Bonus</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	44.6	71.4	78.7	61.6	77.8
<b>Professional</b>	29.5	54	59.1	55.5	74.8
<b>Clerical</b>	21.4	36.11	44.9	39.1	72.3
<b>Manual</b>	12.7	15	22.5	26.1	67.3

**Table 10a**

<b>Profit sharing</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	15.1	49.1	15.2	22.5	11.5
<b>Professional</b>	13.2	38.2	7	23.9	8.6
<b>Clerical</b>	12.4	32	5.8	20.4	8.8
<b>Manual</b>	10.3	21.4	3.8	14.7	8.5

**Table 10b**

<b>Team bonus</b>	<b>SSD</b>	<b>CE</b>	<b>SIC</b>	<b>Liberal</b>	<b>Asian</b>
<b>Managemnt</b>	30.5	37	58.4	47.4	42.2
<b>Professional</b>	23.3	30.4	45.6	39.7	36.6
<b>Clerical</b>	21.7	23.9	41.4	31.7	33.4
<b>Manual</b>	18.9	17.5	25.9	24.6	31.9

The third hypothesis about age is in line with previous study by Lavelle et al. (2012) who found that effect of age on profit sharing is not significant. The younger companies are less expected to use profit schemes as compared to share options because of their need to generate cash for further investment opportunities in the initial phases of organizations and they are less likely to make profit in initial years as compared to older firms. Further, younger organizations need to do more to align interest of their workers and managers with the long

term organizational goals (Pendleton 2001; Lavelle et al. 2012). However, the finding in H<sub>3a</sub> goes against these theories and it stands in line with the findings of Pendleton (2001). A possible reason may be that age of the company is higher than that of its subsidiary operating in the foreign market and thereby has to do more than its parent in the home come country to buy legitimacy and “lock-in” (Lavelle et al. 2012 p. 1596) the manager’s commitment over long term. Thus age of subsidiary rather than company playing the key role.

The fourth hypothesis found that capital intensity is positively related to both scale 1 of financial participation and this result is in line with all past research studies (Lavelle et al. 2012; Jones et al. 2012; Festing et al. 2012). However, finding w.r.t. scale 2 is not statistically significant. This attest to the theory that high capital intensity makes it optimal for the companies to use equity based financial participation schemes (D’art and Turner 2004). Similarly, the size of the company is also found to be positively related with the financial participation. The agency cost theory and problem of moral hazard are cited as the main reason why companies with higher employee count will use financial participation schemes. Croucher et al (2010), Jones et al. (2012) and Festing et al (2012) found very similar evidence. The effect of being Publicly listed firm is also in line with the previously formed expectation about how corporate finance mangers can use equity based schemes to reduce the borrowing cost and generate market for firms stock. Further, effect of trade union is also consistent with the expectations. As Poutsma (2006) found that indirect representation is inversely related to equity schemes.

In my point of view one of the main take away from this study is from the 6<sup>th</sup> hypothesis: the fact that stakeholder based approach of governance is not found negatively related to financial participation schemes based on stock options, employee share schemes, performance based pay and individual bonus. This may fall in line with the arguments that suggest that owing to less pressure in short term profit maximization firms can share their

ownership with workers (Levine 1995; Blair 1995). Jones et al (2012), Festing et al. (2012) and Croucher et al. (2010) found it to be either not significant or negatively related. One reason for that may be that data set used in this study is broader than above mentioned studies. For instance, Croucher et al. (2010) study used data set covering only five countries classified in a two way liberal and coordinated market economies with Germany, Austria, Sweden and Denmark as the proxy for coordinated market economy and UK as the liberal one. Therefore, we can see that there results might have neglected Spain or Japan who tend to score high in financial participation and hence producing skewed results.

### **Limitations and Further Research**

One major limitation of this study is the arbitrariness of financial participation scale developed. Because placed highest weight on the schemes across each category that are extended to manual employees the regression results are totally based on that fact. As a further research interest it is desirable to see if any other method that pulls together these schemes in a different weighing scale generates same ordering for marginal means across five models of capitalism or not. Another limitation is that survey data has Japan as the sole representative of Asian model. Because in theory it consists of Japan and Korea, I believe there might be different ordering if Korean companies are to be included in the study because use of financial participation schemes in countries other than Japan is highly likely to be on a different frequency.

A further research pointer that comes to the mind is analyze financial determinant as the function of ownership's characteristics and home country's management philosophy and institutional framework instead of that of host country which this study did and to see the interaction effects of control variables under each model of capitalism. Further, organizational predictors' can be modeled within each capitalism group and can be used to see how the effect of capitalism varies across different models. Another limitation of this

study is not analyzing the interaction affect between variables. For instance, it might be interesting to see whether the presence of work councils determines the use of financial participation schemes in the same way in the firms operating in liberal markets as it does that for firms in Asian or State Influenced Coordinated Economies. The Asian Economic model has highest percentage of firms using the stock options for manual employees yet the State Influenced Economies use them in highest percentage, nine percent more than second highest of Liberal, more for management. Therefore use of interaction terms might help in explaining which variable is explaining this key difference. For instance, it might be that reason for high use of Stock Options schemes in State Influenced Economies could lie in the fact that because wage bargaining occurs at sectorial level, companies would try to compensate for lack of leverage in wage setting by giving market based incentive to their workers.

### **Conclusion**

This study intended to test the theory that whether financial participation practices of a firm is dictated by institutional configurations of the host country in which it operates which is on different lines from the theory that management philosophy of the home country will dictate its terms. Based on the theory, the hypothesized order of expectations of having the financial participation schemes is formed and rejected based on the findings related to marginal mean of each categorical variable category. The financial participation is measured in two different scales measuring two different classes of schemes. First scale consists of Employee share schemes and stock options, individual performance based pay and bonus. Second scale consists of Group based bonus and profit sharing. In forming each scale across each scheme the highest weight is assigned to scheme that reaches to manual workers. Based on these scales the expectation formed in the hypothesis was statistically rejected. The hypothesis related to firm's characteristics were also tested and found consistent with relevant past research.

While the two main hypotheses were rejected, the study nevertheless is significant in that the next step can be a test of hypothesis on the ordering witnessed in this regression analysis but on a data from different sample and can be controlled for Home Country's effect. What it would then mean is that while the expectations in this study were misaligned, the institutional forces are significant determinants of financial participation and require more analytical study.



## References

- Ahmadjian, C. L. (2001). *Changing Japanese Corporate Governance*  
*Working papers: Department- Center on Japanese Economy and Business.*
- Amable, B. (2003). *The diversity of modern capitalism.* New York: Oxford University Press.
- Arrowsmith, J. And Marginson, P. (2011). Variable Pay and Collective Bargaining In British  
 Retail Banking. *British Journal of Industrial Relations*, 49, 54–79.
- Ashford, R. (1996). Louis Kelso's binary economy. *The Journal of Socio-Economics*, 25(1):  
 1-53.
- Ashford, R. (2010). Milton Friedman's Capitalism and Freedom: A Binary Economic  
 Critique Syracuse University College of Law. *Journal of Economic Issues*, 44(2): 533-  
 542
- Barth, E., Bratsberg, B., Hægeland, T. And Raaum, O. (2012). Performance Pay, Union  
 Bargaining and Within-Firm Wage Inequality. *Oxford Bulletin of Economics and  
 Statistics*, 74, 327–362.
- Beiner, S., Schmid, M. M. And Wanzenried, G. (2011), Product Market Competition,  
 Managerial Incentives and Firm Valuation. *European Financial Management*,  
 17, 331–366.
- Bertola, G., Boeri, T., & Cazes, S. (2000). Employment Protection in Industrialized  
 Countries: *The Case For New Indicators.* *International Labour Review*, 139(1), 57-  
 72.
- Blasi, J. R., Kruse, D. L., & Markowitz, H. (2008). *Risk And Lack Of Diversification Under  
 Employee Ownership And Shared Capitalism.* Cambridge, Massachusetts: National  
 Bureau of Economic Research working Paper 14229, August.

- Bllemare, C. and Shearer, B. (2011). *On the Relevance and Composition of Gifts Within The Firm: Evidence from Field Experiments. International Economic Review*, 52(3), 855-882.
- Block, F. (1999). Political Economy of Modern Capitalism: Mapping Convergence and Diversity. *Contemporary Sociology*, 28(4), 462-463.
- Borjas, G. and Ramey, V. (1995). Foreign Competition, Market Power, and Wage Inequality. *The Quarterly Journal of Economics*, 110(4), 1075-1110
- Brewster, C., Sparrow, P. and Vernon, G. (2007). *International Human Resource Management*. London: Chartered Institute Of Personnel And Development.
- Calmfors, L. and Driffill, J. (1988). Bargaining Structure, Corporatism and Macroeconomic Performance, *Economic Policy* 6, 1988. Reprinted in P. N. Junankar, ed., *The Economics of Unemployment, vol. III, Edward Elgar, 2000*.
- Chibber, V. (1999). Building a Developmental State: The Korean Case Reconsidered. *Politics & Society September*, 27, 309-346,
- Chibber, V. (2003). Locked in place: State-building and late industrialization in india. *Princeton, N.J: Princeton University Press*.
- Cin B, Han T, And Smith S. (2002). A Tale Of Two Tigers: Employee Financial Participation In Taiwan And Korea. *International Journal of Human Resource Management* 14(6), 920–941.
- Clark, I., Almond, P., Gunnigle, P. and Wachter, H. (2005). The Americanisation of the European business system?. *Industrial Relations Journal*, 36: 494–517.
- Coates, D. (2005). *Varieties of capitalism, varieties of approaches*. New York: Palgrave Macmillan.
- Croucher, R.,Brookes, M.,Geoffrey, W. and Brewster, C.(2010). Context, Strategy and Financial Participation: A Comparative Analysis. *Human Relations*, 63(6), 835-855

- Cuñat, V. and Guadalupe, M. (2004). Executive Compensation and Product Market Competition. *Centre for Economic Performance London School of Economics and Political Science*.
- Dicks, D.L. (2012). Executive Compensation and the Role For Corporate Governance Regulation. *Rev. Financ. Stud.* 25 (6): 1971-2004 First Published Online April 16, 2012
- Dunbar, A. E., & Kumbhakar, S. C. (1992). An empirical investigation of the association of productivity with employee stock ownership plans. *The Journal of the American Taxation Association*, 14(1), 22.
- European Trade Union Institute. (2013). National Industrial Relations. Retrieved from <Http://www.Worker-Participation.Eu/National-Industrial-Relations/Countries/Sweden>
- Farndale, E., Brewster, C., & Poutsma, E. (2008), Coordinated Vs. Liberal Market HRM: The Impact Of Institutionalization On Multinational Firms. *International Journal Of Human Resource Management*, 19(11), 2004-2023.
- Fronningen, L. A. and van der Wijst, N. (2009). *Ownership Structure and Performance of the Largest German Companies*.
- Funk, P. and Wanzenried, G. (2003). *Product Market Competition And Executive Compensation: An Empirical Investigation*.
- George A. Akerlof. (1982). Labor Contracts as Partial Gift Exchange  
*The Quarterly Journal of Economics*, 97(4), 543-569
- Georgio, G., Noia, C. and Piatti, L. (2000). Financial market regulation: The case of Italy and a proposal for the euro area. *Financial Institutions Center, The Wharton Business School*.
- Grant, Robert M. (2010). *Contemporary Strategy Analysis*. John Wiley & Sons

- Guery, L. (2013). Safeguarding Investments in Human Capital: Evidence Of Complementarity Between ESO And Involvement Practices. *25th Annual Conference of SASE (Society for the Advancement of Socio-Economics), 27-29 June, Milan*
- Gunnigle, P. (2008). Between Boston and Berlin. *International journal of human resource management (0958-5192)*, 19(2): 240
- Gunnigle, P., O’Sullivan, M., and Kinsella, M. (2002b). “Organised Labour in the New Economy,” in *Irish Employment Relations in the New Economy*, eds. D. D’Art and T. Turner, Dublin: Blackhall, pp. 222 –258.
- Hall, P. A., Soskice, D.W. (2001). *Varieties of capitalism: The institutional foundations of comparative advantage*. New York: Oxford University Press.
- Hartzell, J.C. and Starks, L.T. (2003). Institutional Investors and Executive Compensation. *The Journal Of Finance*, 58(6), 2351-2374
- Hassan, H., & Hoshino, Y. (2008). Beginning Of Stock Option-Based Compensation in Japan: A Test Of Alternative Theories. *Journal of Financial Management & Analysis*, 21(2), 11-35.
- Höpner, M. (2005). What Connects Industrial Relations And Corporate Governance? Explaining Institutional Complementarity. *Socio-Economic Review*, 3(2),331-358
- Hübler, O. And Jirjahn, U. (2003). Works Councils And Collective Bargaining In Germany: The Impact On Productivity And Wages. *Scottish Journal of Political Economy*, 50, 471–491.
- Jensen, M. and Murphy, K.J. (1990). Performance Pay and Top-Management Incentives. *Journal Of Political Economy* ,98(2),225-264
- Jones, D. C., Kalmi, P. And Mäkinen, M. (2006). The Determinants Of Stock Option Compensation: Evidence From Finland. *Industrial Relations: A Journal Of Economy And Society*, 45, 437–468.

- Jones, D. & Kato, T. (1995). The Productivity Effects of Employee Stock-Ownership Plans and Bonuses: Evidence from Japanese Panel Data. *The American Economic Review* , 85(3): 391-414
- Kalmi, P. (2012). Bargaining regimes, variable pay and financial participation: some survey evidence on pay determination. *International journal of human resource management (0958-5192)*, 23 (8), p. 1643.
- Kalmi, P., Pendleton, A. and Poutsma, E. (2005). Financial participation and performance in Europe. *Human Resource Management Journal*, 15(4): 54-67
- Karuna, C. (2007). Industry product market competition and managerial incentives. *Journal of Accounting and Economics*, 43(2-3), 275-297
- Konari Uchida. (2006). Determinants of Stock Option Use By Japanese Companies. *Review of Financial Economics*, 15(3), 251-269
- Kruse, D. L. (1992). Profit Sharing And Productivity: Microeconomic Evidence From The United States. *Economic Journal*, 102(410), 24-36
- Kwok, C. and Tadesse, S. (2006). The MNC as an Agent of Change for Host-Country Institutions: FDI and Corruption. William Davidson Institute Working Paper No. 882. Available at SSRN: <http://ssrn.com/abstract=1017583>
- Lavelle, J. (2012). "The determinants of financial participation schemes within multinational companies in Ireland". *International journal of human resource management (0958-5192)*, 23 (8), p. 1590.
- Lavelle, J., Turner, T., Gunnigle, P., & McDonnell, A. (2012). The determinants of financial participation schemes within multinational companies in Ireland. *International Journal Of Human Resource Management*, 23(8), 1590-1610.
- Long, R. J. (2000). Employee profit sharing: Consequences and moderators. *Relations Industrielles*, 55(3), 477-504.

- Markowitz, H., Blasi, J. and Kruse, D. (2010). Employee stock ownership and diversification. *Annals of Operations Research*, 17(1): 95-107
- McNabb, R., & Whitfield, K. (1998). The Impact Of Financial Participation And Employee Involvement On Financial Performance. *Scottish Journal Of Political Economy*, 45(2), 171.
- Menke & Associates Inc. (2009). ESOPs Vs Profit Sharing Plans. Retrieved from [http://www.menke.com/archives\\_articles/esops-vs-profit-sharing-plans-3-31-09.pdf](http://www.menke.com/archives_articles/esops-vs-profit-sharing-plans-3-31-09.pdf)
- OECD Economics Department Working Paper No. 226, "Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation" And OECD Economics Department Working Paper No. 419, "Product Market Regulation in OECD Countries: 1998 To 2003
- Ortiz-Molina, H. (2007). Executive Compensation and Capital Structure: The Effects of Convertible Debt and Straight Debt on CEO Pay. *Journal of Accounting and Economics*, 43(1), 69-93
- Ostrom, E. (1986). An Agenda for the Study of Institutions. *Public Choice* 48(1): 3-25.
- Oyer, P. and Schaefer, S. (2005). Why Do Some Firms Give Stock Options To All Employees?: *An Empirical Examination Of Alternative Theories*, *Journal Of Financial Economics*, 76(1), 99-133,
- Palcic, Donal (2012). "The impact of large-scale employee share ownership plans on labour productivity". *International Journal Of Human Resource Management*, 23 (17), p. 3710.
- Pendleton, A. and Robinson, A. (2010). Employee Stock Ownership, Involvement, And Productivity: An Interaction-Based Approach. *Industrial and Labor Relations Review* ,64(1): 3-29

- Popov, A. (2014). Credit constraints and investment in human capital: Training evidence from transition economies, *Journal of Financial Intermediation*, 23(1)
- Poutsma, E. (1999). Recent Developments in Financial Participation within the European Union. (Project No. 0218) for European Foundation For The Improvement Of Living And Working Conditions
- Poutsma, E. (2001). Recent Trends in Employee Financial Participation in the European Union. *Dublin: European Foundation for the Improvement of Living and Working Conditions.*
- Poutsma, E., Blasi, J. R., & Kruse, D. L. (2012). Employee Share Ownership And Profit Sharing In Different Institutional Contexts. *International Journal of Human Resource Management*, 23(8), 1513-1518.
- Poutsma E., Kalmi P., Pendleton A.D. (2006). The Relationship between Financial Participation and Other Forms of Employee Participation: New Survey Evidence from Europe. *Economic and Industrial Democracy*, 27 (4), 637-667
- Raith, M. (2003). Competition, Risk, and Managerial Incentives. *The American Economic Review* ,93(4), 1425-1436
- Regan, Aidan. (2012). The political economy of social pacts in the EMU. *New political economy*, 17 (4): 465.
- Traxler, F., Arrowsmith, J., Nergaard, K. and López-Rodó, J. (2008). Variable Pay And Collective Bargaining: A Cross-National Comparison Of The Banking Sector Economic and *Industrial Democracy August*, 29, 406-431
- Varian, H. R. (2010). *Intermediate microeconomics: A modern approach*. New York: W.W. Norton & Co.
- Woodward, M. C. (2011). Jobless rates in different types of labor market areas, 2000-2010. *Monthly Labor Review*, 134(8), 30-33.

- Würz, S. (2003). European Stock-Taking On Models Of Employee Financial Participation, S.76-84.
- Ya-Ting, L. (2003). The productivity effects of employee stock-ownership plans: Evidence from panel data of taiwan electronic companies. *International Journal of Management*, 20(4), 479-489.
- Young-Hoon C. (1996). The Growth of Enterprise Welfare in Japan. *Economic and Industrial Democracy*, 17: 281
- Zhaoyang G. K. and WANG X. (2010). *Government Control And Executive Compensation: Evidence From China*.