# ENTREPRENEURSHIP IN EUROPE AND THE UNITED STATES: SECURITY, FINANCE, AND ACCOUNTABILITY

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#### I. INTRODUCTION

Growth patterns in Europe since the 1970s present a worrying trend. In the postwar years Europe grew much faster than the US, but it started from very low levels (45% of the US) and the very fast growth was in large part a catch-up after World War II destruction. The catch-up was facilitated by the fact that, while the war had devastated the capital stock of Europe and killed millions of people, the level of the remaining human capital, in terms of education, training, etc., was much higher than in any developing country.

Around 1975, the catch-up phase has probably ended. Fueled by long years of spectacular growth, however, the Europeans (with the partial exception of Britain) looked very optimistically into the future, and were more than ever determined to push ahead with the build-up of the most extensive welfare system in the world. Indeed, just as the growth rates started to stall, the rate of growth of the expanding welfare benefits – medical care, state-funded pay-as-you-go retirement, extended vacations and maternity leaves, dramatic expansion of higher education, housing subsidies, etc. – rapidly accelerated. All the while, the economic system was assumed to be primed for further growth and not in need of any fundamental reforms.

More or less at the same time, the mood in the United States was much more despondent. The failure in Vietnam, the collapse of the Bretton Woods system built on US economic and financial dominance, the military catch-up of the Soviet Union to a coequal position as a superpower, the first oil crisis, and the perceived loss of competitiveness of US manufacturing – all these made the US look like an empire in the throes of decline. In response, beginning with deregulation in the late 1970s, and, more intensively, with the reforms of the 1980s, the US went through a serious retooling of its economy and a rapid change in its attitude to income redistribution, resulting in a shake-up of corporate structures and governance, a change in the tax system, and a release of

both more market forces and greater entrepreneurship.

Whether or not as a result of these changes, the US has grown consistently faster than Europe since the mid 1970s, and the difference, measured in GDP terms, has become progressively greater (see Figure I.1).

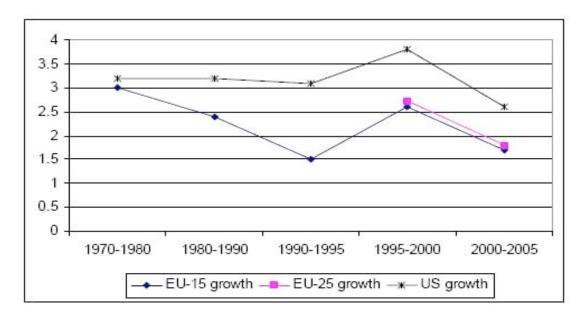


Figure I.1: EU vs. US average real growth, 1970-2005 (constant prices 1995)

Source: Altomonte and Nava (2005) on the basis of Sapir et al. (2004) and Eurostat data. 2005 data are forecasts.

What do we make of this disparity between the US and Europe?

The most worrisome possibility is that we are dealing with a secular trend. Thirty years is a long time and it may be supposed that there is a systemic difference between the two regions and that, unless Europe reforms, perhaps dramatically, the trend may very well continue indefinitely, and relegate Europe to a second-rate economic status.

It is possible, of course, to say that GDP growth is only one dimension of overall social prosperity, along with such things as social stability, equality, social cohesion, the amount of available leisure time, quality of the environment, or even various "cultural" factors, such as high levels of humanistic education and cultural consumption that do not easily translate into economic terms. In this broader context, it may be conjectured that the Europeans have simply traded lower levels of GDP growth for higher quality of life as measured by other metrics. Whether this is a sustainable choice in the long run, given the interdependence of world economies, is another matter that need not be settled here.

But we should also consider another possibility, namely that the last 30-year period, long as it is, may not really reflect any secular trend, but rather be a phase in what is essentially a long-term cyclical development.

Economic history may contain two different types of periods: times of innovation, change and retooling; and periods of consolidation, characterized by more gradual technical and efficiency improvements. In this context, the mid-1970s may not have been just a watershed when Europe completed its catch-up phase and the US reformed its economy. The period may have also involved a broader underlying technological and social change. The development of computerization, biotechnology, rapid advances in medicine, the move of the advanced economies away from manufacturing and toward technology and service-oriented economies, the rapid growth of some third world countries that started to compete effectively in many areas (mostly manufacturing) previously dominated by the advanced countries – all of these factors produced a very different economic environment than in the 1950s, 1960s, and 1970s, one in which there is a very high premium on the ability to adjust quickly and change rapidly in response to events. But this new environment may also be a phase of a historic cycle: the pace of innovation may slow down again after a while, to be followed by a long period of a more gradual development during which new production techniques will be perfected, the production cost will be incrementally reduced, and a number of local efficiencies will be gradually implemented. (A similar cycle may have taken place earlier in the twentieth century, when the period of enormous change related to the inventions of electricity. internal combustion engine, and the rise of a modern corporation, was followed by a long period of gradual development and consolidation.)

Corresponding to the two different types of periods in economic development, there may be two different types of economies, each better suited than the other to deal with the challenges of one or the other phase of the cycle. One type (US) may be more dynamic, more easily adapting to change and innovation, but also imposing more insecurity on its labor force and providing generally lower levels of social (though not political) stability. The other type (more characteristic of continental Europe and Japan) may be better adapted to periods of consolidation and gradual perfection of the basic economic institutions. The greater labor-force and institutional (including corporate) stability, greater insistence on technological, rather than financial and managerial, competence, greater ability of corporations and financial institutions to commit to long-term projects with lesser short-term returns – all these and other factors may make European economies do better in times when the pace of innovation slackens and a period of consolidation sets in.

After all, just when the wheels of fortune were about to change so dramatically around the mid-1970s, most institutional economists were expanding on the alleged superiority of European and Japanese financial and corporate institutions in comparison with their American counterparts. Indeed, many observers predicted that the Japanese just-in-time production methods and the German and Japanese long-term-perspective bank financing would bury the American economy, too much focused on short-term profits and shoddy, inefficient production. It may thus very well be that times are going to change again and, instead of Europe's adjusting to the new economy, the new economy may adjust to Europe.

Whether the present lag in Europe's performance is a secular trend or a phase in a cyclical development has, of course, significant implications for the future. If Europe is long-term failing to grow, it must either effect far-reaching reforms or lose its preeminent position in the world of the future. If Europe is choosing to put more emphasis on broader measures of the quality of life, rather than focusing primarily on GDP growth, the main question is whether this choice is viable in a globalized economy and whether Europe can preserve its way of life in the long-term, rather than slip to a second-rate status with respect to most (and not just GDP) indicators. Finally, if Europe is going through a phase for which its institutions are less suited, but which will give way to a new period in which it can recover, Europe might need to take some steps to minimize its losses in the present period, but need not remake itself in the image of the more dynamic American economy.

Although it may be a very important question, we do not take a position on which of these scenarios is the most likely to describe the challenges to be faced by Europe in the future. Instead, we want to focus on why Europe is not performing well now and why, if objective circumstances do not change and the pace of technological and other developments does not slow down, Europe is not likely to do much better.

While the reasons for the slow European rate of growth, as compared to the US, are certainly multifaceted and the phenomenon does not have one explanation, we will concentrate on an aspect which, in our opinion, is both significant and not often discussed, perhaps because it does not fit well within the dominant framework of contemporary economic analysis. It concerns the different levels of entrepreneurship across the Atlantic divide.

An important, perhaps decisive, element of economic growth comes from a society's ability to search for and pick new projects with high economic returns, but also high amounts of (often undiversified) risk. Moreover, at the frontiers of growth, when creativeness and innovation are the real driving force of growth, and imitative behavior is not sufficient to create new value, the risk involved in many projects is often not known and perhaps even unknowable with any degree of precision. The presence or absence of institutions allowing a society to make decisions about such projects and use the large amounts of local and often ineffable skills of various economic actors may be decisive in terms of the chances of economic success. We understand entrepreneurship to be a central factor in this process.

In order to grow, especially in a fast-changing economic environment, therefore, a society must develop institutions that allow and encourage entrepreneurial decisions. This involves, in particular, three aspects on which we want to focus here and which we think may play a role in explaining why Europe grows more slowly than the United States.

First, because all entrepreneurial decisions involve risk, a society must allow and encourage people to make risky decisions – which means that economic actors must

<sup>&</sup>lt;sup>1</sup> Phelps (2006).

expect their returns from riskier projects to include a risk premium that will compensate them for the risks they undertake. But the risk premiums offered by different societies for projects with similar risk characteristics may differ for a variety of reasons: states may tax upside returns at different rates, there may be various nonpecuniary rewards (such as prestige accorded to people who make money) that some societies provide to a greater extent than others, and, depending on the base level of security guaranteed by different societies, the opportunity cost of becoming an entrepreneur may differ as well. Different societies may also provide financing for entrepreneurial projects at different cost and this will affect the risk premiums for such projects. In what follows we will present some evidence in support of the proposition that the agents' incentives to make risky decisions are better in the US than in Europe and that this may in part account for the growth rate disparity.

Second, people in certain environments may differ in terms of their risk preferences. If the French, for example, are, by and large, more risk averse than the Americans, this may result in a less risky "portfolio" of potentially valuable projects that will be pursued in the French economy (and hence yield lower overall returns). What shapes the risk preferences of various societies is a complex question which we do not purport to unravel. But we hypothesize that the Europeans are indeed somewhat more risk averse than the Americans and that part of this aversion may be an effect of living in an environment in which prolonged disincentives to make risky decisions becomes entrenched in many people's risk preferences. This means that reforming certain aspects of European economies may be made more difficult by the fact that, even if the disincentives were to be removed, it might take some, perhaps considerable, time for people's preferences to evolve as well.

Finally, projects often have to be picked under the circumstances in which it is not objectively known what the probability distribution of their returns might be. No one has become very rich pursuing projects that everyone knows to be lucrative – indeed, since widely known opportunities are quickly arbitraged away, there are no such widely-known lucrative projects, and economists are right that money does not normally lie in the street. What distinguishes a successful entrepreneur from other wannabies is that he sees higher returns or lower risks in a project that others do not consider worthwhile or do not even consider. Moreover this difference of opinion between a successful entrepreneur and his less successful competitors is often not a matter that concerns something that can ever be objectively known. Much like the ability to ride a bicycle, entrepreneurial ability may involve what some have termed "tacit knowledge" (Polanyi 1962), i.e. ineffable skills that cannot be communicated or, even less, explained, to others, but which nevertheless turn out to be correct. Indeed, were we able to specify some general, objectively reproducible criteria of how an entrepreneur arrives at his insights or what he does, the advantages of entrepreneurship would disappear, to be replaced by a system of rules that could be followed by anyone.

This last feature of entrepreneurship – that it involves decisions based on "hunches" that involve idiosyncratic estimates of the probability distribution of outcomes of alternative projects, often opposed to the standard wisdom of those who study the

phenomena involved – poses a potentially very serious problem for the institutional design of a society keen on encouraging and picking up the more entrepreneurial projects. In particular, it is very difficult to accommodate entrepreneurship in any institutional setting in which an aspiring entrepreneur needs to convince others to provide him with financing or other approvals required to proceed with his projects. The very idiosyncrasy and ineffability of entrepreneurial skills makes it to be expected that people in possession of "standard wisdom" will be unpersuaded by an aspiring entrepreneur and, as members of decision making bodies, will consider themselves responsible for not allowing what appears to be quirky projects to proceed. It is our hypothesis in what follows that a number of American institutions are better suited to deal with these types of problems than their European counterparts. In particular, we believe that the financing of new ventures in America, as well as the governance systems of American corporations, are superior in this respect to their European counterparts.

One more caveat before we proceed. What follows is more of an essay with illustrations than a tightly constructed economic theory. Entrepreneurship is a multidimensional concept, not well captured by the prevalent economic theories which tend to assume away all imperfections of human knowledge and leave no room in their models for real creativeness and innovation that lie at the center of entrepreneurial behavior. Even to the extent that entrepreneurship could be modeled, it is not our ambition to do so here, as much as propose some suggestions about the various factors that may help account for the disparities of economic performance on the two sides of the Atlantic.

#### II. THE CHOICE OF ENTREPRENEURSHIP

#### 1. Risk Taking in Europe and America

When asked: "Suppose you were working and could choose between different kinds of jobs. Which would you prefer: a) being an employee; or b) being self-employed?" nearly 70% of Americans, as opposed to barely over 40% of the French choose the second option. Table II.1 presents the results of a Eurbobarometer survey asking the same question in a number of countries, and shows that Americans make a choice for self-employment more often than most other people.

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<sup>&</sup>lt;sup>2</sup> For a proposal of an alternative approach to modeling market outcomes that places imperfect knowledge at the center of economic analysis, see Frydman and Goldberg (2007).

**Table II.1 The Choice of Entrepreneurship** 

Country	Percentage of Respondents
	Preferring to be Self-
	Employed in 2004
United States	67
Portugal	63
Spain	62
Italy	52
Germany	46
Austria	46
France	41
Denmark	37
Belgium	36
Netherlands	35
Finland	23
Sweden	15

Source: Eurobarometer 160 (2004)

The same Eurobarometer study shows that almost 60 percent of EU citizens have never considered setting up a business, as compared with slightly over 40 percent of Americans. Young Americans (defined as individuals under 30) express preference for self-employment more often (66.31%) than their counterparts in Germany (59.60%), Hungary (54.22%), Ireland (50.44%), Netherlands (40.29%), and Norway (31.68%) (Blanchflower and Oswald 1998). Similarly, a greater percentage of business school graduates in the United States aspire to entrepreneurial careers than those in Germany (Luthje and Frank 2002) and Spain (Uslay, Teach and Schwartz 2002). Nascent entrepreneurs and new business owners in the United States are also more confident in their skills and more optimistic about good business opportunities (Kollinger 2005).

Given this data, one might expect that a greater percentage of the population would be self-employed in the United States than in Europe. But such is not consistently the case. To be sure, Americans put their money where their mouth is: as Table II.2 shows, significantly more Americans than Europeans undertake some steps to start a business. But the same Table also shows that the number of established businesses is comparatively small in the United States, and Table II.3 shows that the number of business owners as a percentage of economically active population is not significantly larger in the United States than in many European countries.

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<sup>&</sup>lt;sup>3</sup> A number of other studies also found a greater levels of entrepreneurial interest among American business students than among their counterparts in Germany (Busenitz 2000; Weihe 1993), Spain (Busenitz 2000), France, Austria (Weihe 1993), Italy, Sweden, and Norway (Busenitz 2000).

Table II.2: Percentage of Population 18-64 Years of Age Engaged in Business Activity

Country	Nascent	New	Established
	Entrepreneurial	Business	Business
	Activity	Owners	Owners
United	8.80	5.20	4.70
States			
France	4.70	.70	2.30
Norway	4.40	5.20	7.30
Germany	3.10	2.70	4.20
Finland	3.10	1.90	8.60
Austria	3.00	2.40	3.80
Italy	2.90	2.30	6.40
Belgium	2.90	1.20	5.60
Switzerland	2.60	3.70	9.70
Netherlands	2.50	1.90	5.70
Denmark	2.40	2.40	4.40
Spain	2.40	3.40	7.70
Sweden	1.70	2.50	6.30

Source: from Minniti *et. al.* (2005). Nascent entrepreneurs are defined as individuals who have taken some positive step in the past year toward creating a new business that has not yet paid and wages or salaries for more than three months. A new business owner is defined as an owner-manager of a firm that has paid wages or salaries for more than 3, but less than 42, months. Established business owners are owners of businesses that have paid wages or salaries for more than 42 months.

Why, then, given the much larger number of start-ups and the greater willingness of Americans to go into business for themselves, is the proportion of business owners in the United States no larger than in Europe? Clearly, part of the reason is likely to be that the greater proportion of Americans going into business makes running a business in the United States more competitive. Indeed, data show that the rates of firm entry and exit is higher in the United States than in most European countries (Verhoeven and Becht 1999; Stel and Diephuis 2004) and the net-entry or survival rate, defined as the difference between the firm entry and firm exit rate, is much lower (Stel and Diephuis 2004).

**Table II.3 – National Business Ownership Rates** 

Country	Business Owners as a				
	Percentage of Labor Force				
	(excl. Agriculture)				
	2000	2002			
Italy	18.5	18.3			
Portugal	13.5	13.7			
Spain	12.6	12.9			
Belgium	11.7	11.3			
Netherlands	10.9	10.8			
United States	9.8	9.5			
Germany	8.7	8.6			
Switzerland	8.7	7.6			
Austria	8.3	8.3			
Sweden	8.3	8.1			
France	8.3	8.1			
Finland	8.1	7.9			
Norway	6.4	6.5			
Denmark	6.1	6.7			

Source EIM: Comparative Entrepreneurship Data for International Analysis (COMPENDIA 2000; 2002). Includes owners of incorporated and unincorporated enterprises, but excludes unpaid family workers and salaried workers operating a business as a secondary work activity.

But greater competitiveness of business environment in the United States is not likely to be the whole explanation of why the proportion of business owners in the United States is not larger than in Europe. Indeed, while the chances of survival on the margin should be lower in a more competitive environment, it would be very strange if, all other things being equal, the absolute number of businesses per unit of the labor force were to remain constant (as if all economic environments could support only a fixed number of businesses). The other part of the explanation is likely to be that Americans not only go into business for themselves more often than the Europeans, but also that, when they go into business, they are likely to go into a more risky one than their European counterparts. In other words, while Europeans may open shops or service outlets, the Americans may more often venture into more high-tech startups offering greater potential rewards, but also a greater chance of failure.

We have no more than some indications that this is what is going on, but these are nevertheless suggestive. We know, for example, that the turnover rates of American and European businesses become comparable once industry and sectoral composition is controlled for – which would indicate that Americans start more businesses in more volatile areas, in which the failure rates are greater. We also know that the average size of an American startup is smaller at the time of entry, but that surviving firms in the United States expand much faster and attain higher average size than their European counterparts

(OECD 2003; Bartelsman 2003). This again suggests that the volatility (and hence riskiness) of American startups is higher than in Europe.

## 2. The Impact of Labor Markets

Why are Americans more likely than Europeans to start a business and why, when they start one, are they likely to choose a riskier one (and one that presumably brings higher returns)? In what follows we focus on some reasons and largely ignore other possible explanations. In particular, we will not focus on explanations related to "cultural" differences between the two environments. We have mentioned, for example, that being a "self-made man" may confer high social status on a person in the United States (thus effectively raising the returns on entrepreneurial projects), while in a more class-conscious European societies, making (but not inheriting) money may be considered "vulgar" by some influential opinion-makers (thus effectively lowering entrepreneurial returns). 4 Moreover, these attitudes may very well become internalized by the agents themselves, translating into different utility value of entrepreneurial endeavors. While the influence of such factors may be considerable, however, we prefer to avoid explanations that stop at cultural differences which, like Molière's "dormitive power," might themselves call for further explanations. Instead, we prefer to think of cultural phenomena as related to other social and economic conditions— even if the embodiment of those conditions in cultural values may often extend their impact long beyond their own persistence.

The feature of the socio-economic environment we focus on first is the impact of labor markets on entrepreneurship.

It is often observed that labor markets in Europe are less flexible than in the United States: the protection of job security is significantly stronger, minimum wages are higher, and taxation of wages is higher as well. Labor unions are often given a significantly larger role in running many businesses, and nationwide wage negotiations in some countries leave less room for individual businesses to structure their employment relations. It is usually believed that these factors combine to make labor costs in Europe high and lessen the competitiveness of European economies. This may very well be true, but we want to look at the labor market from a particular point of view of its impact on the incentives for entrepreneurship.

Even he standard argument about the obstacles that labor market rigidities pose for firm growth is likely to apply more strongly to entrepreneurial ventures than to established companies. Startup companies face tighter capital constraints and higher labor

<sup>&</sup>lt;sup>4</sup> Survey evidence and anecdotal experiences support the notion that cultures value self-employment and business ownership to differing degrees. The GEM entrepreneurship study, for example, found that national attitudes toward self-employment varied starkly across the Atlantic divide, and that respondents in the United States believed, in overwhelming numbers as compared to European countries, that starting a new business was a respected occupation and that they would approve if their son or daughter started a business (Levie et. al. 1999).

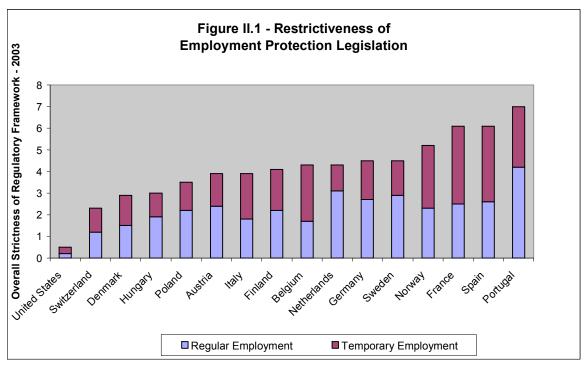
costs may affect them more strongly than other firms. Because entrepreneurial firms require a risk premium to compensate the owners for the increased risks they undertake, these firms are more sensitive to higher taxes which lower the upside returns. Most importantly, entrepreneurial firms grow faster than others and their rate of growth is also harder to predict. They are therefore particularly hampered by the inability to shed workers when risky ventures do not pan out as expected or when firms cannot structure relations with their employees, including their compensation, in ways they consider appropriate.

But the most important way in which labor market conditions affect incentives for entrepreneurship is in their impact on the decision to become an entrepreneur in the first place. Whether people start a business is most often a decision between the relative attractiveness of employment and striking on one's own. A related choice faces the people whom an entrepreneur may want to employ in a new or otherwise risky business: to the extent that such a business is more likely to fail, how does a bright and capable employee weigh the decision to take on a potentially more lucrative and interesting job in an entrepreneurial business, as opposed to staying on with the job he or she now holds?<sup>5</sup> How does this choice compare across the Atlantic divide?

All other things being equal, the decision between entrepreneurship and employment involves weighing the risks and rewards involved in both pursuits. It might be generally said that the path of employment usually offers smaller risks and lower returns, while starting a business is more risky, but potentially more rewarding. But at a closer look, things are a bit more complicated.

European countries are generally characterized by much stricter employment protection than the United States. Figure II.1 plots the relative restrictiveness of labor legislation in a number of OECD countries, and shows that the United States has by far the least restrictive employment legislation for workers with both permanent and temporary contracts. With respect to hiring and firing regulations in particular, the United States is widely considered to be among the nations with the least rigid labor laws worldwide; similarly, American employers encounter the least restrictive regulations concerning working hours and job tenure. (World Bank, 2004).

<sup>&</sup>lt;sup>5</sup> We assume here that an overwhelming majority of people starting a businesses (as well as most valuable potential employees of such businesses) hold jobs as employees in other businesses and are not just entering the labor market. Starting a new business (or being a valuable employee) requires some knowledge and experience that, in most cases, can only be gained by prior employment. We therefore assume that most potential entrepreneurs are employed and that therefore their choice is between staying on employed or branching out on their own. To be sure, there may be some people who start a business straight out of school or because they can't find any other employment, but our "hunch" is that, despite an occasional Bill Gates, these are not usually the most likely successful entrepreneurs.



Source: OECD 2004. The composite OECD indicator is intended to reflect the cost implications of labor protection measures affecting both regular and temporary employment (i.e. "strict" or "restrictive" should be understood as "costly"). The summary values take into account, *inter alia*, overall difficulty of dismissal, procedural inconveniences and requirements implicated when employers elect to initiate the dismissal process, and notice and severance pay provisions.

In this sense, Europeans have more "job security" than Americans do, and thus, when they opt out of a job and decide to go on their own, all other things being equal, they forgo more than the Americans do, who must consider the possibility that they may be fired anyway, even if they don't take the risk of going into business for themselves. As a result, the relative risk-adjusted returns to entrepreneurship are lower in Europe than in the United States.

So much is well understood. But, again all other things being equal, most societies, particularly near the development frontier and in times of rapid change (when predictions concerning future business opportunities are difficult to make), face a tradeoff between job security, in the sense of legal protection of *incumbent* job tenure, and higher levels of unemployment due to the resulting lesser flexibility of the labor market (which requires greater commitment on the part of the hiring employers and makes them more reluctant to hire in the first place). This in turn makes *re-entry* into the job market more difficult, so that the incumbent job security protection, to some extent, generates its own need and desirability. In other words, while Americans have less incumbent job security, by the same token they also have more "employment security" in the sense of being able to leave and re-enter the job market more easily than their European counterparts. But this in turn makes entrepreneurship again less risky for the Americans: not only are they

not giving up valuable job security when they start a business; they also have more of a cushion if the business does not work out.<sup>6</sup>

The effects of what we termed job and employment security are, of course, not independent of each other because employment security (the ability to re-enter) lessens the value of job security and, as we noted already, job security lessens the ability to reenter. Thus, what makes the difference in terms of the relative incentives of Europeans and Americans to engage in entrepreneurial activities is the *joint effect* of job and employment security. But given the strong sense among the Europeans that job security is extremely important to them<sup>7</sup> and the much more persistent difficulty of re-entry in Europe, we believe that the combined effect of these two factors on the diminished incentives of the Europeans to enter entrepreneurial occupations (and to choose riskier entrepreneurial projects once they are in business for themselves) is likely to be significant.

#### 3. Access to Capital and the Effects of Accountability

Entrepreneurs often operate under significant capital constraints. Most finance the startup or expansion of their business by drawing on their personal savings or borrowing from family and friends. But the ability to reach other sources of funding may be of great importance, and will have an impact on the likelihood that a business is started or, once started, turns out to be successful.

Even when capital is available, the form in which it is accessible may make a significant difference as well to a new or rapidly growing business. On one end of the spectrum, an entrepreneur may turn to debt finance for the venture, perhaps by opening a line of credit with a commercial bank (Landier 2003). Creditors, however, do not share in the upside of the business, but are exposed to the downside; lending to new, high-risk businesses is therefore generally inimical to their business philosophy. New ventures do not have proven track records, cannot promise steady returns, and rarely possess the requisite tangible assets to post as collateral for their debt obligations (OECD 2004). Moreover, since startups generally require significant amounts cash in the early stages of

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<sup>&</sup>lt;sup>6</sup> To be sure, the Europeans have more of a safety net when they are unemployed. But the prospect of better support when unemployed may be of lesser importance than the ability to re-enter the job market, especially for people with entrepreneurial temperament who are likely to find "being on the dole" particularly irksome.

<sup>&</sup>lt;sup>7</sup> There is ample evidence for this proposition. See, e.g., Clark (1998). According to the Eurobarometer survey [cite], over 20% of European respondents preferred wage employment over entrepreneurship because the former was "not as risky"; only 5% in the US sample gave the same response. Over half of the sampled Europeans also agreed with the proposition that "One should not start a business if there is a risk it that it might fail," as compared with only a third of their US counterparts.

<sup>&</sup>lt;sup>8</sup> A member of the Supervisory Board of a prominent Austrian bank told one of us that "the first criterion of the bank's funding of a business is that owner must not want to get rich quickly" – perhaps a defining characteristic of a true entrepreneur!

growth, the correspondingly large debt obligations are likely to be inappropriate from a cash-flow management perspective.

The alternative, equity-based financing, is fraught with a different set of problems. Successful investors in startup and new venture environments are necessarily "active." Innovative, high-risk startups often operate in new markets where publicly available information is scarce. Entrepreneurs often have non-financial, reputational incentives, such as the desire to be the first to market or to publish, which may compromise long-term profitability. Financiers must be willing to monitor the new venture, incentivize successful commercialization (Jensen 1993; Sahlman 1990), and be ready to intervene by exercising their broad control rights (Landier 2003; Gompers 1995; Lerner 1995a,b). But investor interference can also harm the business, impose wrong attitudes toward risk, and generally prevent the entrepreneur from being able to act on his own business sense.

This last point requires some elaboration. "Money does not lie in the street" and people do not make fortunes by acting according to well-recognized rules. The truth of this proposition goes beyond the trite observation that an entrepreneur sees opportunities that others miss. For even when told of an entrepreneurial idea, others tend to reject it; not because it is unproven, but because it most often cannot be proven at all. Entrepreneurship is not a science: it does not proceed in accordance with well understood rules or knowledge that can be objectively demonstrated (Kirzner, 1979). Under conditions of change and uncertainty, an objective assignment of probabilities to potential outcomes of a project is well-nigh impossible, and an idiosyncratic, subjective "hunch" that turns out to be accurate after the fact is a paradigmatic example of entrepreneurship. But the very feature of an entrepreneur's approach that allows him to succeed by breaking the mold of routine, rule-governed behavior, makes it very difficult for him to convey his inherently subjective "hunches" or "intuitions" to others whose views are within the prevailing consensus. And if an entrepreneur cannot explain his ideas in intersubjective terms, it is also extremely difficult for an entrepreneurial decision maker to account for his business decisions (Frydman et al. 2006). Even if a decision is right, the decision maker might be unable to clear it in advance with his monitors or, if he makes it on his own responsibility, explain it adequately after the fact if things happen to go wrong (Hayek, 1948).

Entrepreneurial decisions thus involve a large measure of ineffable skills and an often idiosyncratic evaluation of the situation that makes bureaucratic oversight, which relies heavily on rational, rule-governed justification of most actions, unsuitable. Consequently, despite the nurturing and monitoring that new entrepreneurial businesses may need, it is crucial that their access to capital not be conditioned on a control structure of bureaucratic accountability. Indeed, if the control structure of a firm requires that the decision maker justify what he does, the decision maker is likely to forgo those projects which depend on his "hunches" that he will have difficulty explaining to others, and this fact may severely restrict the opportunity set out of which feasible projects will be chosen.

Independently of the particular form of financing used, there is therefore an institutional component that needs to be taken into account when considering the governance effects of the financing of entrepreneurial endeavors. New businesses are both too small and too hard to monitor to be able to access financial markets on their own; they usually need intermediary institutions, such as banks or venture capital funds. But there may be a big difference in how appropriate these institutions may be for picking promising businesses, being able to offer them proper services and advice, and monitoring their performance. Banks, for example, even when they make equity investments, are normally institutionally inept at coping with the corporate governance issues facing startup businesses and, as a general matter, mostly companies with strong reputations or long-standing relationships with the banking industry can hope to obtain bank financing (Jeng and Well 2000; Black and Gilson 1998; Ueda 2004).

The specialized intermediary institution developed in response to the financing needs of an entrepreneurial startup is the venture capital firm, which is much more than a simple conduit for investment funds. The venture capitalist's incentive structure, business acumen, and network of suppliers, customers, and contacts forces entrepreneurs to focus on technical development (Black and Gilson 1998). Venture capital firms play a particularly crucial role in knowledge-based industries by selecting the most promising projects, financing and commercializing technological innovation, and lending their much-needed managerial and technical expertise. (Holmes and Schmitz 1990; Hellmann 2000). They also confer reputational advantages on a new business.

But the pivotal role of venture capital with respect to the development of entrepreneurial businesses requires that the venture capital firms themselves be structured in a certain way, most importantly, that they be run by entrepreneurs, and not bureaucrats. This means that the managers of venture capital funds must be principals in their firms and that outside investors commit their funds for a specified period of time, without conditioning their participation on burdensome conditions or otherwise restricting the managers' ability to make entrepreneurial decisions. When, on the other hand, venture capital firms are offshoots of traditional conservative financial institutions, such as banks, these institutions tend to staff them with their own bureaucratic personnel, and the latter are likely to go for safer and less speculative investments, and pass on the chance to participate in the more genuinely entrepreneurial projects.

How do Europe and America compare on this score? The European risk capital market is not only smaller and more fragmented than that of the United States, but also focuses largely on buyouts as opposed to early-stage and technology investment<sup>10</sup>

typically occur in the later, more mature stages of a firm's growth cycle. Outside the United States, however, "venture capital" is frequently used to describe private equity investments generally, without regard to early versus late stage investing.

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The term "venture capital," as used here, refers to seed, startup, and expansion financing. It is important to distinguish this form of private equity investing from management and leveraged buyouts. Buyouts

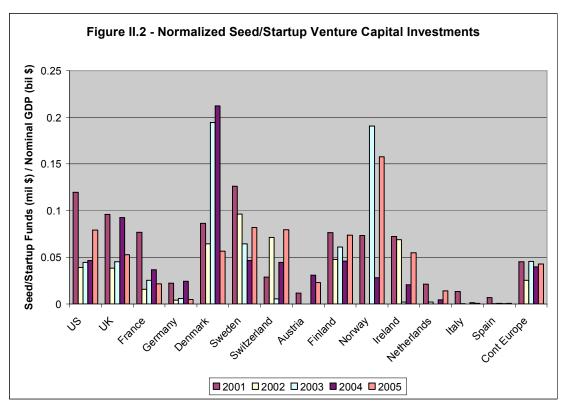
 $<sup>^{10}</sup>$  In 1999, approximately 13% of gross venture capital financing in Europe was directed towards seed and start-up investments, as compared to more than 30% in the US. The relative percentages of venture capital

(European Commission 2000; Black and Gilson 1998; Jeng and Wells 2000). Figures II.2 and II.3 reveal that seed and early-stage venture capital investment as a percentage of nominal GDP in Europe is simply anemic, as compared to the United States. Most strikingly, new venture financing in the largest economies on the Continent, particularly France and Germany, is an order of magnitude less than in the United States. Recent efforts in the European Union to increase entrepreneurs' access to capital, involving tax and bankruptcy reform, and public financing models, have been largely thwarted by the economic downturn. On the whole, European economies face continuing fiscal and structural challenges to the promotion of venture capital investments and even further shift away from early-stage and seed investments in favor of late-stage or buyout opportunities (European Commission 2004; Bottazi and Rin 2002).

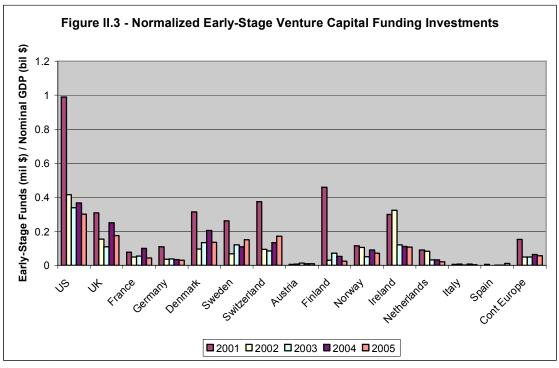
The pool of venture capital investors also varies significantly across the Atlantic: In the United States a sizeable portion of venture capital is supplied by pension funds, which are usually patient and passive investors. In Europe, by contrast, banks and financial institutions account for more than thirty percent of new venture funds raised (Jeng and Wells 2000; Bottazi and Rin 2002). Figure II.4 suggests that, despite an overall, global withdrawal since the 'irrational exuberance' of the late 1990s, banking and financial institutions remain relatively entrenched in the European venture capital market: bank-financed venture capital investments in continental Europe are consistently greater, by 58.2% in 2000 and by 52.4% in 2005, than in the US. Another difference is the relative prevalence in Europe of "captive funds" which are managed by venture capital firms deriving more than 80% of their financing from one source, often a financial institution (Hellmann, Lindsey and Puri, 1999).

allocated to high-tech industries are even more striking: 26% in Europe versus 80% in the US (European Commission, 2000).

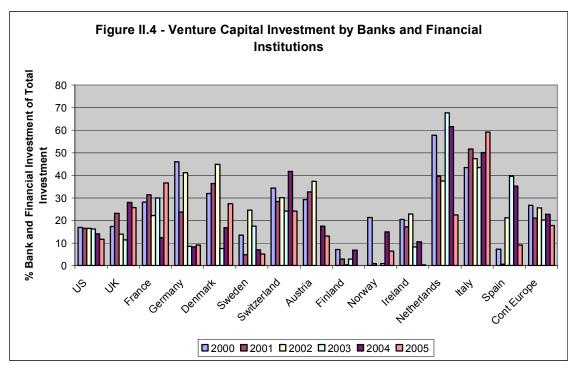
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Source: Thomson VentureXpert; compiled by the authors.



Source: Thomson VentureXpert; compiled by the authors.



Source: Thomson VentureXpert; compiled by the authors.

Venture capital firms in the United States are generally organized as limited partnerships, while in France and Germany they gravitate towards other corporate governance structures, many being subsidiaries of corporations or financial institutions. (Lerner 1995a,b). As a result of this and other factors, European venture capitalists eschew managerial or supervisory roles over portfolio companies, retain fewer control rights, and replace entrepreneurs less often, as compared to their American counterparts (Schwienbacher 2002; Lerner and Schoar 2003). The sectoral distribution of European private equity investments tends toward manufacturing, agriculture and finance; by contrast, as suggested by Table II.4, the vast majority of portfolio companies in the United States are in the biomedical, computer, and telecom sectors, while the manufacturing sector garners only a small percentage of total U.S. venture capital investment.

**Table II.4 – Sectoral Distribution of Venture Capital Investment (% of total)** 

Year	Teleco	m	Сотри	ter	Manufactı	ıring	Biome	ed	Electro	nics	Othe	er
	Europe	US	Europe	US	Europe	US	Europe	US	Europe	US	Europe	US
1991	2	12	6	19	56	13	6	25	3	17	27	14
1992	4	21	4	12	58	8	5	22	3	10	26	27
1993	1	21	6	30	59	8	6	21	4	7	24	13
1994	2	17	4	18	61	9	5	23	4	10	24	23
1995	5	18	7	21	56	12	8	22	4	12	20	15
1996	4	15	5	27	52	9	6	20	4	7	29	22
1997	6	16	7	30	51	8	7	27	5	8	24	11
1998	9	16	9	36	46	8	7	17	3	11	26	12
1999	12	17	11	56	50	6	7	7	2	6	18	8
2000	14	17	13	58	43	7	10	6	4	8	16	4

Source: Bottazzi and Rin (2002).

The dominance of bank investment and the lack of supervisory control over new ventures in Europe gives rise to a venture capital market that is inherently less effective as a driver of entrepreneurial growth. Banks and financial-institution-controlled funds tend to direct their seed or early-stage investments to value prospects in low volatility industries. Captive funds are similarly among the least aggressive in their investment strategies (Hellmann, Lindsey and Puri, 1999). Indeed, passive financing precludes successful early-stage investments in high-tech, high-risk ventures, which naturally require a hands-on approach, technical expertise, and constant monitoring on the part of the investor.

#### 4. Capital Markets

Financial markets are an important determinant of entrepreneurship not only at the startup phase, but also at the time of exit. The liquidity of a successful business may significantly raise its value to begin with, and thus raise expected returns at the time a potential entrepreneur contemplates going into business. The exact mode of exit can also have significant incentive effects throughout the course of the creation and growth of an entrepreneurial business because different forms of exit allow for different governance arrangements before and after the time when some important principals decide to move on.

Exit is important for both types of principals of a successful entrepreneurial business: the entrepreneur himself, who may want to cash out on his investment, and the venture capitalist whose role is likely to diminish over time and who may come to have better opportunities elsewhere. Non-capital inputs, such as reputation, experience, and

external monitoring, are extremely valuable to businesses in the early-stages of their growth. As a business model succeeds, however, the relative value of the nonfinancial contributions of the venture capital firm declines. Exercising an exit option enables a venture capital firm to recycle its nonfinancial contributions to the success of the startup and reinvest in another early-stage portfolio company. Venture capital exit is also important to the investor community at large, as capital providers learn about the relative success or failure of different fund managers, and have an opportunity to reallocate their capital from less successful managers either to more successful ones or to other investment vehicles (Black and Gilson 1998; Berger and Udell 1998).

Exit may be effectuated through sale, initial public offering (IPO), or repurchase of a principal's stake by the company itself. But all exit mechanisms are not created equal. In particular, exit by IPO is preferred by the original entrepreneur because, as the venture capitalist is replaced by dispersed shareholders, the entrepreneur regains control of the business – something that could not be effected by a sale since an acquirer retains control even if the entrepreneur is kept in a managerial capacity. IPO is also important to the venture capitalist because it increases liquidity and allows to reap additional returns at a time when the relative valuation of publicly traded securities is high (Lerner 1994). Indeed, for these and other reasons, IPO is in fact much more profitable than other forms of exit: studies show that a US firm which eventually goes public yields a 195% average return over a 4.2-year average holding period; the same investment in an acquired firm provides an average return of only 40% over a 3.7-year average holding period (Venture Economics 1988; Gompers & Lerner 1997; Bygrave & Timmons 1992; Bienz 2004).

IPO exit, the linchpin of a successful entrepreneurial environment, is only viable in the presence of a large, vibrant public equity market that has numerous providers of risk capital and permits new firms to issue shares. And here lies yet another difference between Europe and the United States which may be one of the reasons for greater entrepreneurship in America. European stock markets, which are generally less capitalized, have traditionally been also unwelcoming of young companies without established track records, instead predicating listing on sustained positive earnings growth (Pagano, Panetta, and Zingales 1998, Rydqvist and Högholm 1995). The effect of Euro.nm, a consortium of European stock markets for innovative firms in high-growth industries similar to NASDAO, is mixed at best. Euro.nm, which opened in 1997, ceased to exist in December 2000. Even though its member exchanges continue to operate independently, early indications are that both overall and venture-backed IPO activity in Europe is still anemic, and continues to lag significantly behind that of the United States (Tables II.5 and II.6; Botazzi and Rin 2002; European Commission 2004). But until the market for risk capital is adequately developed, early-stage entrepreneurial projects in Europe are likely to be constrained by the inferior exit opportunities.

**Table II.5 – Overall IPO Activity** 

	2001		2002		20	03	2004	
		Capital		Capital		Capital		Capital
	Total	Raised	Total	Raised	Total	Raised	Total	Raised
	IPOs	(\$ Mil)	IPOs	(\$ Mil)*	IPOs	(\$ Mil)*	IPOs	(\$ Mil)*
United								
States	121	39,596	157	40,374	123	41,901	275	66,710
Germany	23	1,384	5	133			6	1,179
Sweden	6	123	4	213			4	257
France	50	4,637	27	1,599	7	4.70	25	3,576
Italy	17	1,652	7	903	3	487	9	2,041
Spain	2	1,526	1	601			3	1,791
Netherlands	2	185					1	15
Norway	5	738			1	20	7	167
Austria	5	53	1	11	4	139		
Finland	·		1	0			1	35
Denmark	3	87		·	1	16		

Source: Thomson Financial. Note: IPO is credited to the domicile nation of the financed company; capital raised refers to the proceeds and overallotment amounts sold in the market specified.

**Table II.6 – Venture-backed IPO Activity** 

	20	001	2	002	20	003	2	004
Country	Total	Capital	Total	Capital	Total	Capital	Total	Capital
	<i>IPOs</i>	Raised	<i>IPOs</i>	Raised	<i>IPOs</i>	Raised	IPOs	Raised
		(mil \$)		(mil \$)		(mil \$)		(mil \$)
United States	22	1,785	20	1,640	22	1,412	67	4,983
France	5	116	4	20	1		2	104
Germany	6	101	1	3			1	51
Italy	1	22					1	102
Spain								
United Kingdom	8	162	4	21	7	108	24	514
Denmark	1	53						
Finland			1	3			1	64
Norway	2	4	2	25	1	18	5	43
Sweden	2	42	1	3				

Source: VentureSource. Note: IPO is credited to the domicile nation of the financed company.

# III. RISK TAKING AND ENTREPRENEURSHIP IN A CORPORATE ENVIRONMENT

Entrepreneurship is usually associated with individuals and small businesses: the "mad inventor" in his garage, a Bill Gates getting on the train of the computer revolution, or a couple of students inventing the Google search engine. But entrepreneurship is, of course, a matter of degree and there is a continuum of entrepreneurial business decisions made by firms of all sizes. Although large firms often focus on more predictable cost

efficiencies and routinize many of their business operations, <sup>11</sup> it is also of great importance that they have an institutional ability and incentives to make risky decisions under conditions of often radical uncertainty. This is why differences in corporate governance structure and management remuneration systems, which may have far reaching consequences with respect to firms' ability to make entrepreneurial decisions, may in part account for the difference in the performance of European and American economies.

In what follows we will consider three basic types of reasons why firms may be more or less inclined to make entrepreneurial decisions: (1) risk attitudes of the owners, (2) distortions due to agency problems and managerial risk preferences, and (3) distortions due to the accountability structure in the corporate governance model.

#### 1. The Impact of Ownership Structure

To the extent corporate governance works to align the incentives of the management with the interests of the owners and other stakeholders, the risk profiles of such owners and stakeholders will have significant influence on firm behavior. <sup>12</sup> If a controlling owner has a large portion of its capital and/or human assets invested in the enterprise, the owner is likely to be risk averse and unwilling to bear the risks of entrepreneurial behavior. The problem is particularly acute in firms that are worker-owned or required to maintain a significant board-level representation of labor interests: the volatility inherent in entrepreneurial strategies often entails rapid expansions and contractions in the labor force, a consequence that is anathema to the current employees interested in stable, long-term employment commitments. State ownership also has serious distorting incentive effects, as the state bureaucrats responsible for monitoring state holdings do not personally participate in the upside of corporate decisions, but can suffer serious negative consequences if the firm has to fire workers or otherwise disappoint the bureaucrats' constituencies.

Even among private owners who are not otherwise stakeholders in the firm, risk attitudes are likely to differ depending on the level of ownership concentration. In diffusely owned firms, shareholders are likely to be diversified with respect to their investment, and can be expected to maximize the value of the firm by ratifying entrepreneurial decisions where the risks seem justified by expected payoffs (Frydman *et al.*, 1999). Conversely, concentrated ownership is likely to involve firm-specific, undiversified investment on the part of owners. To be sure, some institutional investors are capable of spreading the risk of even significant holdings across their investment portfolios (Baysinger 1991), but the diversification of entrepreneurial risk increases overall returns only if the individual stakes are not large relative to the size of the

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<sup>&</sup>lt;sup>11</sup> For a different role played by entrepreneurial decisions in the cost and revenue sides of business management, see Frydman *et al.*, 1999 and 2006.

<sup>&</sup>lt;sup>12</sup> For the impact of ownership on firm performance generally, see Frydman *et al.* (1999, 2000, and 2006); Frydman and Rapaczynski (1994).

portfolio. Large individual or family owners, in turn, nearly always suffer from a lack of diversification. <sup>13</sup>

Finally, different institutional owners may have different investment objectives. We have mentioned already that the state as an owner is likely to have incentive-distorting effects. But other classes of owners, such as banks and insurance companies, might also discourage managers from projects with highly variable returns or distant payoffs. Other institutions, such as pension funds, on the other hand, are likely to have a longer-term horizon and promote entrepreneurship and innovation (Zahra 1996; Kochhar and David 1996).

Again, how do Europe and the United States compare on this dimension? Table III.1 (based on several studies of equity ownership of nonfinancial corporations) and Table III.2 indicate that the shareholder base of European companies is extremely concentrated relative to the United States. While almost one quarter of all U.S. firms report the largest owners' share to be less than 5 percent, and only 9 percent report a majority owner, well over half of all European companies are majority-owned by a single entity. The extremely high levels of concentration persist even in the largest European companies: the mean and median ownership by the three largest shareholders in the ten largest nonfinancial firms in Europe are two or three times larger than in the United States.

<sup>&</sup>lt;sup>13</sup> Family and individual owners may also have other characteristics that contribute to a conservative attitude with respect to risk taking. Founders and family owners often have "dynastic" concerns. While we have no hard evidence of this, anecdotal evidence points to a greater likelihood that European owners are more likely to be concerned with keeping the business in the family, while American founder-owners are more interested in cashing out and not leaving their children in charge.

Table III.1 Ownership Concentration of Listed Nonfinancial Firms (% of All Listed Nonfinancial Firms)

Largest Owners' Share	France	Germany	Italy	Spain	Sweden	United States
>50	55	66	89	49	42	9
30-50	] -	] -	9		31	
25-30				-		
20-25	42	23		49	12	29
15-20	_			-	T	
10-15	_	12		_	11	10
5-10		12	2	_		29
<5	2 _			2	4	23

Sources: Berglof (1990); Berglof et al. (1997)

Table III.2 – Ownership of Ten Largest Nonfinancial Firms

Country	Mean Ownership	Median Ownership	Average Market
	by Three Largest	by Three Largest	Capitalization
	Shareholders	Shareholders	of Firms (\$ bln)
United States	.20	.12	71.65
France	.34	.24	8.90
Italy	.58	.60	3.14
Netherlands	.39	.31	6.40
Spain	.51	.50	1.27
Austria	.58	.51	.32
Germany	.48	.50	8.54
Switzerland	.41	.48	9.58
Denmark	.45	.40	1.27
Finland	.37	.34	1.98
Norway	.36	.31	1.11
Sweden	.28	.28	6.22

Source: LaPorta et. al. (1998).

The incidence of state ownership, essentially non-existent in the U.S., is also quite high in Europe: as shown in Table III.3, a state entity is the controlling shareholder (defined as above 20% ownership) in 20 to 25 percent of all European firms. Finally, as shown in Table III.4, financial intermediaries (very often banks or insurance companies) own significant stakes in many European companies, which suggests a conservative, risk averse attitude among important shareholders. Moreover, in the case of banks at least, the institutional shareholders in European companies are also likely to have debt, in addition to equity, interests in the company, which further increases their conservative bias. In the U.S. companies, by contrast, the interests of financial intermediaries (most often pension, hedge, and mutual funds, rather than banks), are small (never rising to 10%) and overwhelmingly passive.

Table III.3 – State Ownership in Europe and the United States

	Larges	t Firms	Medium-sized Firms		
	20% stake	10% stake	20% stake	10% stake	
Austria	.70	.70	.83	.83	
Norway	.35	.40	.20	.20	
Spain	.30	.45	.20	.30	
Denmark	.15	.20	.20	.20	
Finland	.35	.35	.20	.20	
France	.15	.20	.20	.20	
Germany	.25	.30	.20	.20	
Italy	.40	.50	0	.10	
Netherlands	.05	.05	.10	.10	
Sweden	.10	.10	.20	.20	
Switzerland	0	0	0	0	
Cont Europe	.25		.21		
United States	0	0	0	0	

Source: LaPorta et. al. (1999). The "large firm" set consists of the twenty largest firms in the country by market capitalization of equity at the end of 1995. The "medium-sized firm" sample consists of ten firms with market capitalization of \$500 million or greater at the end of 1995.

Table III.4 – Financial Institution Ownership in Europe and the United States

	Larges	t Firms	Medium-s	ized Firms
	20% stake	10% stake	20% stake	10% stake
Austria	0	0	0	0
Norway	.05	.10	.10	.10
Spain	.10	.15	.40	.40
Denmark	0	.05	0	0
Finland	.05	.25	.10	.20
France	.05	.20	.20	.20
Germany	.15	.25	.20	.30
Italy	.05	0	0	0
Netherlands	0	0	0	0
Sweden	.15	.30	0	.10
Switzerland	.05	.05	0	0
United States	0	0	0	0

Source: LaPorta et. al. (1999). The "large firm" set consists of the twenty largest firms in the country by market capitalization of equity at the end of 1995. The "medium-sized firm" sample consists of ten firms with market capitalization of \$500 million or greater at the end of 1995.

In sum, the owners of European firms are likely to be much less diversified than their American counterparts. Moreover, a significant portion of these owners are risk-averse financial institutions or the state, and labor unions in some countries have a legally imposed voice in running corporations. To the extent that corporate governance mechanisms align the actions of European firms with the interests of their owners, the ownership structure of European companies, as compared to their American counterparts, is likely to dampen the managers' will and ability to make entrepreneurial decisions.

#### 2. Accountability and Control

We have explained already, when discussing the relationship between startups and their financial backers, that the ability to make entrepreneurial decisions depends on a control structure that leaves the decision maker free to make idiosyncratic and unconventional choices characteristic of entrepreneurial behavior. What was true about new entrepreneurs and venture capitalists is also true about decision makers in large and medium-sized corporations: if managers of such firms are to maximize the set of projects available to the firm and pick those with the highest risk-adjusted returns, the structure of accountability in the firm must be set up in such a way that the decision maker can be guided by his ineffable skills and "hunches" and does not have to *explain or justify* his decisions. This does not mean, of course, that the decision maker must not be accountable in *any* sense, but only that the structure of accountability must involve an alignment of incentives, rather than require to obtain *ex ante* authorization for actions or to justify them *ex post* if things do not work out.

It may be stated as a general proposition that European corporate governance arrangements rely less than their American counterparts on the alignment of managerial incentives with the interests of the shareholders and more on managerial accountability and collective corporate leadership. The American governance arrangements, by contrast, typically install the chief executive (CEO) as a semi-dictator at the head of an extremely hierarchical organization and try to curb the CEO's inherent risk aversion (due to a heavily undiversified commitment of the CEO's human capital to the firm) and CEO-opportunism by setting up compensation schemes that offer princely rewards for success and relatively mild punishment for failure.

First, as we already observed, most publicly-owned firms in America have very diffused ownership which leads to shareholder passivity and confers tremendous powers on corporate insiders. As a by-product of what is often perceived as an agency "defect," corporate insiders (defined as the management and directors) have almost unfettered discretion in their choice of projects, and exercise a degree of flexibility functionally approaching that of the classic garage inventor. By contrast, European ownership is usually very concentrated and most firms have one or very few controlling shareholders – the fact that makes other, more formal corporate governance arrangements of less importance, and shifts the actual power to make the more important decisions to the owners, unless the owners are disposed to leave things to the management. We have argued that, given the undiversified nature of the owners' investment and their institutional characteristics, this control structure is likely to result in a less willing approval of entrepreneurial decisions, even if the management might be disposed to pursue riskier projects (which, given the compensation structure of European companies, to be discussed presently, they are not in fact very likely to be). But even with respect to projects that fit with the risk profile of the owners, the managers are not likely to be able to pursue the more entrepreneurial projects, because they will be unable to explain them to their owners and convince them to approve them.

In the absence of active controlling shareholders, whatever (nonlegal) restraints are imposed on the CEO come from the supervision by the corporate board(s). And here again a comparison of the relationship between boards and management in Europe and the United States reveals that American managers exercise a much greater degree of flexibility and independence than their European counterparts. American corporate governance involves a single-tier board, which CEOs have historically dominated; managers frequently control the solicitation process, and it is commonplace for a current CEO to serve on the board of directors (often chairing it as well) (Dalton and Kesner 1987).

The German model illustrates the opposite end of the spectrum. It consists of a two-tiered board system in which the supervisory board (*Aufsichtsrat*), appoints a management board (*Vorstand*) to a five-year term and reviews firm and management performance. Managers are neither permitted to serve on the supervisory board nor do they exercise any influence over the proxy solicitation machinery. *Aufsichtsrat's* members are often appointed for their control of large blocks of shares, and their loyalty is to their own shareholding institutions, rather than to CEOs, to whom they do not owe

their financial or social positions (Roe 1993). Even more importantly, the *Vorstand*, which is responsible for day-to-day managerial decisions is a collective body in which the CEO is more of a *primus inter pares* than a dictator in the mold of the American CEO. (Other Western European corporate governance regimes lie somewhere in between these two extremes, although there is an increasing structural convergence towards the German model, particularly in France and Italy (Hopt and Leyens 2004).)

The foregoing is not to suggest that the monitoring of management by owners and boards is unimportant; indeed it would be foolhardy to ignore the principal-agent issues that may result in managerial self-dealing and other abuses. Rather, the intimation here is that the costs of strict accountability structures need to be considered relevant for the firm's dynamism: the more entrepreneurial spirit of American businesses may be another side of a relatively relaxed supervisory structure.

## 3. Executive Compensation

Compensation structure is the preferred method of aligning managerial incentives with the shareholder interests in the United States, and although the American CEO compensation system has recently come under severe criticism (Bebchuk 2001), it may also generally favor more entrepreneurial behavior than its European counterpart.

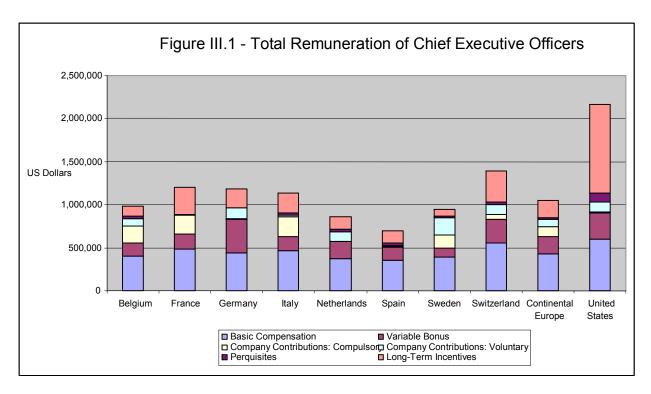
Although shareholder value might benefit from the pursuit of high-risk, high-return strategies, managers, whose human capital investments are nondiversifiable and largely firm-specific, are rationally averse to such undertakings – the inherent managerial preference is for corporate diversification and empire-building, and for short-term efficiency gains even at the expense of long-term returns. Both the structure and the amount of compensation can be used to reverse the innate managerial tendency toward risk-aversion. Moreover, if a compensation scheme properly aligns the incentives of the management with the interests of the shareholders, the management might be given broad discretion with respect to both strategic and tactical decisions, thus avoiding the pitfalls that other forms of accountability may pose for the firm's ability to pursue entrepreneurial projects.

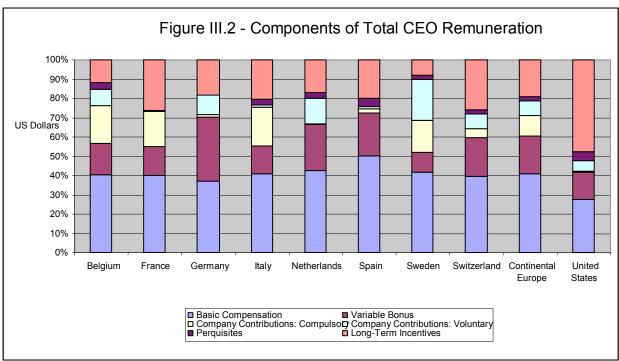
Despite substantial heterogeneity across firms, industries, and countries, executive compensation packages are generally reducible to three basic components: base salary; variable, annual bonuses; and long-term incentives. Accounting profit is the most widely used performance measure to set the level of the variable bonus component. Although accounting measures are simple to understand and managers can easily predict the effect of their strategies on profitability, these measures are inherently backward-looking and subject to manipulation. Since managers and their subordinates compile the data on which compensation is based, they may shift earnings across periods or adjust accruals to meet or exceed performance standards (Healy, 1985). More importantly, executives attentive to short-term earnings measures are likely to shy away from projects that sacrifice current profits but have higher expected values over longer time horizons, such as aggressive research and development investment (Dechow and Sloan, 1991).

To correct the potentially myopic focus of managers, companies offer long-term incentive plans in the form of either bonuses based on a rolling-average three or five-year accounting performance or stock-based incentives, such as restricted stock or stock option plans. Stock option grants are particularly effective in mitigating the effects of managerial risk aversion and in providing managers with powerful incentives to pursue more risky, entrepreneurial projects (Hirshleifer and Suh 1992). Not only are managers permitted to capture the upside potential of entrepreneurship through their ownership stake in the firm, but also the value of the options themselves increases with stock-price volatility, a function of the firm's risk portfolio created by managerial investment strategies.

Two important facts emerge from a comparison of executive compensation practices in Europe and the United States. First, as Figure III.1 demonstrates, American CEOs are paid almost twice as much as their European counterparts, and the significant difference persists after controlling for national discrepancies, such as the tax treatment of base pay and perquisites, purchasing power and public benefits (Abowd and Bognanno 1995), and firm characteristics, such as size, industry, and market environment (Murphy 2002). It is also worth noting that the pay disparity between the United States and Europe is limited to senior executives; there is no meaningful difference across the Atlantic in the compensation of lower-level executives and production employees (Abowd and Bognanno 1995). Indeed, reflecting the much more powerful role of the CEO in America, the difference between the CEO pay and that of the second and third person in command is much more pronounced in American firms than in their more collegially managed European counterparts (Bebchuk 2001).

Second, the structure of executive compensation varies significantly across the Atlantic. When the value of each component of compensation is expressed as a percentage of total remuneration (Figure III.2), stock-based incentives – stock options and stock ownership – constitute a much higher fraction of overall compensation in the US (Abowd and Bognanno, 1995; Kaplan, 1999). Long-term incentives, mostly in the form of stock option grants, represent almost fifty percent of compensation in the United States, but no more than twenty percent in Europe, and the base salary amounts are relatively smaller in the US than in Europe.





Source: Towers Perrin WorldWide Total Remuneration Report 2005-06. The data represent estimates of typical pay for national executives as of April 1, 2005, in locally headquartered companies with approximately US\$500 million in worldwide annual sales. Basic Compensation consists of annual base salary (including regular payments such as 13th month salary and vacation allowance, if applicable) plus performance-unrelated bonus; Variable Bonus consists of performance-related payments; Compulsory Company Contributions consist of employer contributions/expense for social security, compulsory benefit programs and mandated termination indemnities; Voluntary Company Contributions are typical employer contributions/expenses for private retirement, life insurance, disability, medical and other voluntary employee benefit plans (including executive pensions); Perquisites consist of annual cash value of company cars, club memberships and other perquisites that are typically provided to executives; Long-Term Incentives consist of annual expected value of stock-related awards (e.g., stock options, stock grants) and other awards.

The reasons for the dramatic differences in the amount and structure of CEO compensation are hotly contested in scholarly literature. Some observers explain it as resulting from self-dealing and rent extraction by insufficiently monitored American managers (Bebchuk 2001), while others trace it to the more favorable tax treatment of option compensation in the United States (Murphy 2002) or to the differences in the magnitude or type of demand for chief executives (Rosen 1992). But even if, as the critics contend, the incentive effects of executive compensation in the US may be far from optimal, the effects of the higher and more incentive-based compensation of the US CEOs are clearly relevant in assessing their incentives to make entrepreneurial decisions: high incentive-based compensation creates a greater upside for the managers and provides a risk premium for the pursuit of entrepreneurial projects.

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