

Part one

European Venture Capital Markets: Recent Developments and Perspectives

1 Venture capital in Europe: closing the gap to the U.S.

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Abstract

We review recent developments in the European venture capital (VC) markets. For decades, most of the Continent has lagged behind the U.S. in attracting and retaining young entrepreneurs. Despite several government attempts to provide tax incentives and an appropriate infrastructure that would allow young start-up firms to establish themselves, European private and public markets for high-risk companies are still weak. While we document that Europe's VC markets have grown considerably over the past eight years, European VC funds underperform U.S. funds by a significant margin. We explore the reasons behind this underperformance and discuss possible remedies. Our study draws valuable lessons from the U.S. to show how important a flourishing venture capital market is to a country's economic development and how Europe may close the existing gap between the old and the new world.

1.1 Introduction

Although the U.S. venture capital market remains the largest in the world, venture capitalist activity abroad has been growing rapidly in recent years. Accompanying this trend has been an increased interest in the relative performance of venture capital investments around the world and in the reasons behind some of the documented differences (see, for example, Mayer et al., 2004).

Young start-up firms frequently lack sufficient revenue during the first few years of their corporate life and have to look to outside investors for financial support. As noted by Nuechterlein (2000), about two-thirds of the average VC-backed company's total equity is supplied by venture capitalists. Such start-up funding is typically used to develop a prototype and fund marketing and sales. In addition, venture capitalists frequently fund firms during later stages to allow them to grow more quickly than retained earnings alone would allow. If all goes well, the funded firm will reach the point where it can go public, allowing the venture capitalists to realize a return on their investment and exit the firm. Alternatively, venture capitalists can cash out by selling the start-up firm to another company.

In the U.S., both exit strategies are used equally often (Schwienbacher, 2005; Nuechterlein, 2000). In contrast, in Europe – which until recently lacked a liquid,

transnational stock market that is at par with the U.S. National Association of Securities Dealers Automated Quotation (NASDAQ) market and which has an underdeveloped equity culture – venture-backed companies are more likely to be acquired by another company or another VC fund than sold to the public through an initial public offering. The lack of appropriate exit venues is frequently viewed as one of the main reasons why the European VC market lags behind that of the U.S. (Bottazzi and Da Rin, 2002).

Our study aims to provide a detailed comparison of the VC markets in Europe and the U.S. and draws important lessons that should be of use for VC fund managers, academics, and regulators alike. In the first part of our study, we analyze venture capital flows both in Europe and the U.S., using a comprehensive sample of venture investments made between 1998 and 2005. We then survey the comparative empirical literature to contrast recent developments in the VC markets both within Europe and between Europe and the U.S. While our results suggest that the European VC markets have caught up with the U.S. in terms of size, the literature notes that large differences still remain. One of the most problematic differences between European and U.S. VC investments is that the former vastly underperform their U.S. counterparts.¹ We identify several factors that may cause these performance differences and examine what European regulators can do to overcome them.

In the second part of our study, we focus our attention on recent developments in the European stock markets. Exiting a VC investment by means of an Initial Public Offering (IPO) is viewed by many VC fund managers as highly desirable. Yet, while regulators across Europe have made numerous attempts to create a financial infrastructure that would make it easier for young high-tech firms to access the equity markets, many of these endeavors have failed.

Finally, in the third part of our study, we discuss various other strategies that regulators can employ to aid entrepreneurial firms and the venture capitalists backing them. If properly implemented, such policies should lead to economic growth and help reduce Europe's high unemployment rates.

1.2 The European and U.S. venture capital markets – a comparison

The venture capital industry started in the U.S. and slowly spread around the globe. As the U.S. VC markets matured, the industry began to emerge in Europe (see Bruton et al., 2005). In the late 1970s, The U.K. and Ireland were among the first European countries to attract venture capitalists. Early VC funds were typically set up as affiliates of U.S. firms and drew heavily on American capital and expertise. Continental Europe followed in the early 1980s, where VC funds were frequently set up by large domestic banks. While the European VC industry closely follows the U.S. model (Manigart, 1994), differences in the institutional environment and in the tax and securities laws governing VC investments have caused the European VC market to develop very differently from that in the U.S.

¹ Cochrane (2005) shows that – after controlling for selection biases using a maximum likelihood estimate – venture capital investments are very similar to traded securities, averaging a log return of approximately 15% per year. Yet, comparable studies in Europe find returns that are frequently below risk-adjusted required rates of return (see, for example, Hege et al., 2006; Engel, 2004).

1.2.1 Facts and figures

Table 1.1 provides an overview of the venture capital markets in the 16 largest European economies and the US during the period from 1998 to 2005.² In Panel A, we provide information on aggregate VC fund flows in each country.

Panel A provides yearly data of the total VC funds disbursed in a given country per year, measured in US\$ million. Panel B divides the VC funds disbursed in a given country by the country's GDP. For better readability, results are displayed in one hundredth of a percent. Data on venture capitalist funding are derived from the Security Data Company's VentureXpert database. GDP data are based on national accounts data provided by the World Bank and the Organisation for Economic Co-operation and Development (OECD).

Consistent with Bottazzi et al. (2004) we observe that during the earlier part of our sample period, the European VC markets were dwarfed by the U.S. market. In 1998, for example, European venture capitalists disbursed approximately US\$8 billion, less than half the funds that were disbursed in the U.S. during that year. Fueled by the high-tech boom of the late 1990s (see Mayer et al., 2004) the venture capital markets both in Europe and the U.S. grew rapidly in 1999 and 2000. Yet, while U.S. VC markets experienced a rapid decline in 2001/2002, the European markets remained comparatively strong and actually overtook the U.S. in terms of total funding activity in 2004 and 2005.

To account for differences in the size of each country's economy and thus allow for a better comparison of VC markets across countries, Panel B divides VC fund flows in each country by the country's GDP during that year. The last two rows support the observations we made in Panel A, in that Europe lagged behind the U.S. in the late 1990s but subsequently caught up with the American market.

Interestingly, the figures in Panel B reveal large differences in relative VC market sizes across Europe. Consistent with Bruton et al. (2005), we observe that the U.K. and Ireland have particularly well-developed VC markets, with VC fund flows in some years close to 1% of GDP. In Continental Europe, France and Germany show a well-developed VC market, but also smaller countries such as Belgium and the Netherlands stand out. As Bottazzi and Da Rin (2002) point out, differences in laws, tax regulations, and institutional structures may likely explain some of these differences. The VC market in the Netherlands, for example, flourished earlier than in the rest of Continental Europe because the pension fund industry invested in private equity and because special tax treatment for pension fund contributions created one of the largest pension fund industries in the world (Sormani, 2001). Spinner (2003) notes that other European countries are following suit and are making a series of legislative changes designed to encourage enterprise and jumpstart the venture capital industry. In 2002, for example, Germany overhauled its takeover laws. More recently, tax laws have been introduced that are intended to relax the requirements needed for Benelux countries to create a fiscal unity and allow advantageous tax treatment to apply. At the same time, Italian lawmakers are overhauling financial assistance rules contained in the Italian Code to allow target companies' assets to be used as general security for acquisition finance. The importance of such regulatory changes is emphasized by Cumming et al. (2004).

² We also examined fund flows in Eastern Europe. These countries are not included here because their VC markets were either negligible or non-existent throughout our sample period. For important insights on this topic, see Schöfer and Leitingner (2002) who provide recommendations addressed at European regulators to assist the development of a VC industry in these countries.

Table 1.1 The venture capital market in Europe and the U.S.

	1998	1999	2000	2001	2002	2003	2004	2005
Panel A: Total VC Funds Disbursed (in US\$ Million)								
Austria	50.1	481.7	155.6	200.8	28.3	64.3	107.7	43.4
Belgium	165.9	531.9	494.0	687.0	825.8	239.6	698.6	649.1
Denmark	15.6	367.1	424.7	270.2	1,574.3	547.5	575.5	1,231.4
Finland	106.4	92.2	360.1	672.6	615.0	307.1	212.1	368.7
France	436.1	1,860.6	5,804.0	3,186.4	7,000.7	4,436.9	4,189.1	6,361.6
Germany	457.7	1,472.0	4,648.5	2,451.9	2,985.0	5,394.8	10,962.8	8,412.3
Greece	0.0	0.0	0.0	65.4	1.6	68.5	0.0	15.1
Ireland	242.0	375.4	587.8	680.9	1,298.2	1,367.4	800.4	783.4
Italy	151.6	496.0	1,367.7	1,043.0	670.0	2,116.1	1,426.1	1,637.7
Netherlands	431.5	775.9	1,261.0	916.6	636.6	1,572.0	922.0	805.8
Norway	3.2	130.0	132.5	298.8	65.3	352.8	137.1	246.9
Portugal	11.0	197.2	47.7	39.3	12.8	0.0	0.0	3.3
Spain	239.9	338.0	480.4	733.1	865.3	1,282.6	1,038.6	689.1
Sweden	150.8	304.6	1,492.9	1,540.1	772.1	346.7	570.7	390.6
Switzerland	193.5	297.9	588.3	386.8	393.5	624.9	322.8	564.4
UK	5,214.0	11,513.2	13,882.8	8,264.4	7,288.3	6,275.6	13,550.5	9,911.4
Europe Total	7,869.4	19,233.5	31,728.0	21,437.2	25,032.7	24,996.9	35,514.2	32,114.2
US	18,568.0	37,171.7	63,929.8	28,396.8	22,048.4	28,685.0	24,095.4	27,058.7

Panel B: Total VC Funds Disbursed Relative to GDP (in 1/100%)

Austria	1.35	11.88	8.03	10.41	1.36	2.52	3.69	1.93
Belgium	6.63	21.19	21.63	30.21	33.60	7.88	19.83	18.04
Denmark	0.90	21.20	26.84	17.00	92.01	25.94	23.84	48.39
Finland	8.22	7.21	30.03	55.49	46.59	18.98	11.41	12.68
France	3.00	12.89	43.71	23.78	48.04	24.80	20.47	23.12
Germany	2.13	6.98	24.46	12.96	14.76	22.08	40.00	18.46
Greece	0.00	0.00	0.00	5.57	0.12	3.95	0.00	1.42
Ireland	27.82	39.25	61.90	65.92	107.78	89.88	44.07	66.45
Italy	1.27	4.20	12.73	9.57	5.65	14.41	8.50	9.29
Netherlands	10.97	19.47	34.02	23.86	15.20	30.66	15.92	20.24
Norway	0.21	8.23	7.94	17.60	3.43	15.99	5.48	7.17
Portugal	0.98	17.14	4.48	3.58	1.06	0.00	0.00	0.20
Spain	4.08	5.61	8.27	12.05	12.61	14.56	9.99	5.83
Sweden	6.08	12.11	62.32	70.10	31.95	11.50	16.47	14.00
Switzerland	7.38	11.52	23.91	15.45	14.23	19.42	9.03	9.22
UK	36.63	78.85	96.52	57.74	46.57	34.91	63.79	49.04
Europe Average	7.35	17.36	29.17	26.96	29.68	21.09	18.28	19.09
US	21.29	40.35	65.47	28.18	21.13	26.19	20.57	23.43

1.2.2 A review of comparative studies

While our statistics suggest that the European venture capital markets have caught up with the U.S. in terms of size, the extant literature points out that large differences still remain between the two markets.

A detailed comparison between Europe and the U.S. is provided by Schwienbacher (2005) who surveys venture capitalists on both sides of the Atlantic. He finds that European VC investments are not as profitable as those of their U.S. counterparts and attributes the relative underperformance of European VC funds to several factors: (1) European fund managers monitor their portfolio companies much less frequently than their U.S. peers, (2) European VC funds face less liquid markets, both in terms of human capital and in terms of exit strategies that are available to them (forcing them to shop around longer when it comes to replacing key employees or selling shares in one of their ventures), (3) European venture capitalists syndicate less frequently, thus incurring higher risk, and (4) European venture capitalists are much less likely to use convertible securities.

Yet, despite these differences, Schwienbacher also documents that young European and U.S. VC firms are actually quite similar, suggesting that only older and larger VC funds show substantial dissimilarities. As the European VC industry grows and additional funds become established, these factors may ultimately lead to a convergence of both markets.

Schwienbacher's results are not unique. Earlier studies by Cumming and MacIntosh (2003a, 2003b) examine all possible exit routes (not only IPO exits), and find that European venture capitalists have a much harder time exiting their investments (for a comparable U.S. study, see Das et al., 2004). They argue that even the surge in high-tech IPOs in Europe in the late 1990s and the creation of several new stock markets geared to high-tech companies did not alleviate these problems. Other comparative studies between the European and U.S. VC markets include Cumming (2002), Bascha and Walz (2001), and Kaplan et al. (2004). Their results are generally similar.

Engel (2004) notes that European VC firms had to make a large number of write-offs in recent years, suggesting some serious problems and inefficiencies in the European VC markets. Engel cites reports by the European Private Equity and Venture Capital Association (EVCA, 2001, 2002) that list 36.5% of all divestments in Germany in 2001 and 22.1% in 2002 as write-offs, much higher than comparable figures in the U.S.

A more recent study by Hege et al. (2006) provides additional evidence on the performance of European and U.S. venture capitalists. In line with Schwienbacher (2005), they find that U.S. venture capitalists generate significantly higher returns than European VC firms. Their results suggest significant differences in terms of contracting behavior such as staging frequency and syndication that may explain the performance differences. Yet, when they compare U.S. venture funds investing in Europe with their European peers, they find no evidence that would suggest that U.S.-managed funds outperform. Thus, while the U.S. VC market is one of the largest and most successful in the world, they suggest that the U.S. model can not be easily exported or imitated.

While earlier studies by Manigart (1994) and Sapienza et al. (1996) attribute the differences between the venture capital markets to heterogeneous cultural norms, studies by Black and Gilson (1998), Jeng and Wells (2000), and, more recently, Cumming et al. (2006) suggest that capital markets are the primary cause of the discrepancies. In brief, they argue that the presence of a well-developed market for IPOs and a norm of relatively rapid exit by venture capitalists in the U.S. create a vibrant industry that motivates a greater intensity of involvement and a more rapid development of expertise in the

U.S. than, for example, in Germany and other places where public markets for high-risk companies have been comparatively weak. Thus, while their view includes an element of institutional forces (that is, norms of implicit expectations of venture capitalist exit), they focus on the impact of capital markets on differences in industry structure and behavior. In the following section we explore capital market differences in more detail and examine recent developments in Europe that were intended to close the existing gap between the two markets.

1.2.3 European small-company stock markets

Many European countries provide venture capitalists with insufficient exit mechanisms, thus limiting their willingness to pursue certain investments. As a result, young start-up firms may not be able to raise the funds they need, which may ultimately hamper economic growth and job creation in that country (Botazzi and Da Rin, 2002). One of the main reasons for the lack of exit venues lies in the illiquidity of local stock markets. Even though European countries such as Belgium, the U.K., France, Germany, Italy, and the Netherlands have exchanges that are specifically aimed at small and medium start-up companies, entrepreneurs in these countries face some significant financing obstacles (Nuechterlein, 2000). First, unlike in the U.S., institutional investors in Europe tend to concentrate their investments in larger capitalization stocks. Moreover, most European countries prohibit pension funds from investing in VC funds, thus limiting the amount of capital that these VC funds can raise and infuse into start-ups (Hardouvelis et al., 2006.) Another problem arises from the fact that many European small-company exchanges are not independent, that is, they are frequently under the same management as the countries' primary markets. With two or more exchanges under their control, managers tend to promote the larger, more prominent exchange (Nuechterlein, 2000). In contrast, the NASDAQ market in the U.S. is independent from both the NYSE and AMEX, resulting in fair competition for new listings among the exchanges. As a result of these differences, venture capitalists in Europe are much more likely to exit their investment through a third-party acquisition than through an initial public offering – the preferred exit venue in the U.S.

To remedy some of these problems, Europe created the EURO Neuer Markt (EURO.NM), a transnational stock exchange specifically aimed at young start-up firms. To remedy the lack of liquidity that most start-ups experienced in their respective home countries, the EURO.NM allowed for cross-border trading in the small company markets of Belgium, France, Germany, the Netherlands, and Italy. The EURO.NM was quite successful. By early 2000, the exchange had attracted over 150 listings with a combined market capitalization of more than US\$30 billion (see Nuechterlein, 2000). The member markets share trading and disclosure rules, access to all EURO.NM markets through cross-membership of financial intermediaries, a common infrastructure for the dissemination of market information, and joint marketing agreements to promote companies internationally.

Another attempt by European stock markets to establish a transnational stock market was the European Association of Securities Dealers Automated Quotation (EASDAQ) market, which was created in September 1996, the same year as the EURO.NM, and organized across 14 countries in Europe with headquarters in Brussels. The purpose of the EASDAQ was to provide a broader range of financial resources for start-ups than

the typical stock market in Europe. Yet, in contrast to the EURO.NM, the EASDAQ grew with lackluster speed. Within three years of its organization, only 49 firms listed on the exchange with a total market capitalization of US\$21 billion. Eventually, in mid 2001, the EASDAQ was acquired by the NASDAQ and has since become NASDAQ Europe. The companies listed on the EASDAQ (now NASDAQ Europe) are generally larger and face tougher listing and disclosure requirements. In addition, the exchange maintains a fast-track trading link with the NASDAQ, which appeals to institutional investors (Nuechterlein, 2000).

Another noteworthy development is the creation of the Neuer Markt by the Frankfurt Stock Exchange in 1997. The market was off to a great start and soon played a dominant role in Europe in terms of issue activity. For example, in both 1999 and 2000 more than 130 firms went public on this stock market segment, even though it had the most rigid listing requirements within the different segments of the Frankfurt Stock Exchange. Yet, after the stock market bubble burst, IPO activity in Germany soon came to a complete standstill, with not a single IPO in 2003. As a result, the Frankfurt Stock Exchange closed the Neuer Markt and established a new stock market segment with new listing requirements. In late 2005 the Frankfurt Stock Exchange founded the Entry Standard, which aims to be a market for small and medium-sized companies with few listing requirements. This stock market segment is modeled on the AIM Market in London, which was very successful even during the market downturn in 2003 and 2004 and also aims to be a market for small and medium-sized companies with few listing requirements.

1.3 Economic effects and government intervention

A flourishing VC industry has been shown to have a positive influence on a country's economic growth and its domestic job market. Nuechterlein (2000), for example, notes that venture-backed companies have historically created a disproportionate number of new jobs – many of them well-paid and highly skilled – and are a key source of research and development spending. When comparing the job markets in the U.S. and Europe, Sener (2006) finds that despite large companies cutting jobs on both continents, the U.S. economy has benefited from a significant number of new business formations, with Europe trailing far behind. This is supported by Shi et al. (2006) who show that between 1995 and 2002, 2300 U.S. companies went public in the U.S., compared with less than 1100 in Europe. As a result, many governments have become increasingly interested in promoting a healthy VC market. Yet, the European and American VC markets have undergone distinct developments in recent years that were not always crowned by success. We discuss the recent developments in both regions, paying particular attention to the question what actions governments can take to promote funding for new ventures.

1.3.1 Governmental promotion of the venture capital industry

Direct government support

There are various ways in which a government can support entrepreneurs and/or the VC industry. One possibility is to provide direct financial support to start-up firms. The U.S. government, for example, designed a program, the Overseas Private Investment

Corporation (OPIC), under which it offers loan guarantees, small business loans, project finance, and political risk insurance for U.S. companies undertaking projects abroad. To be approved for funding, applicants typically have to show that their projects will not only develop and expand business operations in certain emerging markets but also that they have the potential to create U.S. jobs and accelerate U.S. exports (see Madeo, 1994).

Besides financing large overseas projects, the agency has a special program under which it provides financing support for U.S. small and medium-sized enterprises (SMEs). While it is still comparatively small, the program continues to grow. In 2005, for example, OPIC committed US\$343.2 million in financing to 52 SME projects, compared with \$240.2 million for 49 projects in 2004.³

In addition, several U.S. states enacted legislation allowing the creation of Certified Capital Companies (CAPCOs). These VC funds have to invest at least 60% of their capital in private in-state companies for the purpose of stimulating economic growth in regions that have traditionally not received much venture capital. In contrast to private VC firms, which are mainly funded by institutional investors and pension funds, CAPCOs are financed by insurance companies, which are given tax credits as an incentive to become limited partners (see Nuechterlein, 2000). To date, CAPCO legislation has been adopted in five states, including Louisiana, Missouri, Florida, New York, and Wisconsin and is under consideration in eight other states (see Barkley et al., 2001.)

Tax incentives

High tax rates can be a serious impediment for economic growth. Thus, by reducing taxes, governments can provide a crucial catalyst for the formation and ultimate success of young start-up firms. Nuechterlein (2000) and Gompers and Lerner (2001) provide a good example for the effect of tax reductions, showing that VC financing and new business registrations increased significantly in the U.S. following a decrease in the capital gains tax rate from 49% to 28% in 1978, and to 20% in 1981. In contrast to the U.S., most European countries tax capital gains at rates of 60% or more, hindering the formation and expansion of new ventures.

Another way in which the government can support entrepreneurs relates to the tax treatment of stock options. Many start-up firms – especially those in the high-tech sector – are short on cash during their early years, yet they need to offer competitive salary packages to attract and retain talented employees. To draw employees from larger, more established firms, start-up firms frequently use stock options that require no cash outlay when they are issued but may result in significant payoffs in later years if the company's stock performs well. As noted by Gompers and Lerner (2001), the U.S. tax code makes stock options considerably more attractive than they are in Europe. Specifically, U.S. stock option holders are taxed on their profits when they sell the underlying stock. Stock options in most European countries, on the other hand, are taxed as regular income at the time they are granted (Nuechterlein, 2000). As a result of these differences, European start-ups face a tough time when competing with larger firms in the European labor market, and confront an even tougher challenge if they try to attract talented personnel from the U.S.

³ Overseas Private Investment Corporation, *OPIC News* – February 2006, Vol. 8 No. 2, page 1.

Adequate infrastructure

Besides providing young start-up firms with a well-developed infrastructure in the form of a reliable and efficient transportation, utility, and communications system, governments can make various other infrastructure investments to spur entrepreneurial development. Following our earlier discussion, establishing a liquid stock market that allows venture capitalists to exit their investments is viewed as one important step a country can take. In addition, it is important to understand that a growing number of businesses are founded with no assets other than their intellectual property rights (Nuechterlein, 2000). The success of many of these businesses depends on a fast and efficient patent and copyright system and the adequate enforcement of the laws governing intellectual property rights. While the European copyright system is widely viewed as one of the most efficient systems in the world, the patent process costs about US\$150 000, compared with US\$20 000 in the U.S. (see Singer and Stauder, 2003; Nuechterlein, 2000).

Bankruptcy laws

Governments should not only create appropriate exit channels for VC firms but also provide for effective liquidating strategies in case an investment does not perform as planned. While both the U.S. and Europe have well-developed bankruptcy legislation, there are some significant differences that make European bankruptcy laws considerably stricter than comparable U.S. laws.

In Europe, managers can face severe sanctions if they delay a bankruptcy filing past a certain point (see White, 1996). In France, for example, managers can be held personally liable for the firm's debts if they don't file for bankruptcy within 15 days of the firm becoming insolvent. Bankruptcy laws in the U.S., on the other hand, do not impose any penalties for filing delays.

Another difference relates to the question of who initiates the bankruptcy. Voluntary bankruptcy filings are almost always initiated by a company's managers, while involuntary bankruptcies are typically initiated by outside creditors. In the U.S., involuntary bankruptcy is discouraged, as three or more creditors have to file the required petition together. In contrast, under most European laws, any party – including managers, members of boards of directors, workers' representatives, and the bankruptcy court itself (see White, 1996) – is encouraged to initiate an involuntary bankruptcy filing. From the entrepreneur's perspective, it is thus much riskier to operate a business in Europe than it is in the U.S.

Finally, when a European firm files for bankruptcy, courts will appoint an outside party to take a position in the firm, which severely limits the control the existing manager has in the bankruptcy process. In the U.S., the procedure is similar if a firm chooses to liquidate, that is, if it files for Chapter 7 bankruptcy protection. If a firm chooses to restructure, however, it may file for Chapter 11 bankruptcy protection, which allows the existing manager to remain in control. Taken together, U.S. entrepreneurs generally have a better opportunity to restructure their firms (and re-emerge from bankruptcy) than their European peers who lose most of their influence once bankruptcy proceedings have been initiated.

From an entrepreneur's personal perspective, there are large incentives for incorporating in the U.S. as well. A U.S. entrepreneur who manages a company that eventually goes bankrupt is quite frequently viewed as experienced and entrusted to start another firm.

European (and also Asian) entrepreneurs, on the other hand, typically suffer detrimental reputational losses if they have to file for bankruptcy or, as Nuechterlein (2000) puts it, '[in Europe] bankruptcy carries a stigma that frequently destroys an entrepreneur's future.'

Local support

Besides the role that the federal government plays in enhancing entrepreneurial development, support on a local level is also crucial. Such support is generally more developed in the U.S. than it is in Europe. The U.S. Small Business Administration (SBA), for example, administers the Small Business Development Center Program, which consists of more than 1100 local offices that provide current and prospective entrepreneurs with management assistance.

SBA centers are allocated throughout the U.S. to provide assistance not only in major urban centers but also in remote regions. In addition, they provide various customized programs to help economically and socially disadvantaged groups such as women, veterans, and the disabled start their own firms.⁴ Furthermore, the SBA created the Angel Capital Electronic Network (ACE-Net, recently renamed to Active Capital), an online system that brings together entrepreneurs looking for private investment, and investors who seek investment opportunities. The system allows entrepreneurs to post their business plans online for as little as US\$450 and to register up to US\$5 million in securities for sale per year (see Leach and Melicher, 2006).

Litigation risk

Although the U.S. is, in many respects, one of the best locations for an entrepreneur to start a business, it does have its drawbacks. High wages, high health care costs, and expensive corporate real estate may be one detriment. In addition, entrepreneurs frequently view the high risk of being sued as a major problem. Damage awards or settlements in product liability or employment discrimination suits – to name a few – are often significantly larger in the U.S. when compared with Europe; and, while companies can insure themselves against some of these risks, they do bear the costs indirectly in the form of higher insurance premiums.

Potential problems

While we outlined various ways in which governments can support entrepreneurial development, it is important to understand that none of the prescribed changes are easy to implement. Changing the tax code or bankruptcy laws, for example, is certainly a time-consuming and difficult process. Similarly, with most of Eastern Europe having been under communist rule for more than four decades, it may take some time to instill an entrepreneurial spirit in its people.

Finally, with often large amounts of money at stake, corruption and the resulting misuse and misallocation of funds can become a serious problem. While the U.S. and most European countries are arguably less affected by this issue, the extant academic literature sees corruption as a serious impediment for economic growth in many developing

⁴ See also the SBA's website at <http://www.sba.gov/sbdc/aboutus.html>.

countries. Thus, even if governments adopt strategies aimed at supporting entrepreneurs, corruption can result in the selective granting of tax incentives, the misallocation of government grants, and a variety of related problems.

1.4 Conclusion

Despite various attempts by European governments to provide proper incentives and an adequate infrastructure to help attract and retain young entrepreneurs on the Continent, they have lagged behind the U.S. in doing so. Sure, there are cultural differences between Europe and North America. While a majority of the North American population has its roots in Europe, the pioneer spirit of the early settlers and the belief that with hard work and the proper attitude one can achieve everything (become a ‘self-made man’) are still ingrained in the average American and foster a strong entrepreneurial spirit. Yet, while cultural differences such as these may be hard to overcome, governments have considerable leverage in influencing the economic environment that may ultimately determine the success or failure of a young entrepreneur.

An expensive and complicated patent system is only one of the hurdles an entrepreneur faces in Europe. Yet, an efficient system to protect intellectual property rights is now more important than ever as we move into the digital age. The lack of adequate exits for venture capitalists is another problem faced by Europe. While several European exchanges have established trenches for high-risk firms in the past, many of them have failed. Many market participants blame corporate scandals for the downfall of the EURO.NM and similar markets across the continent. Yet, the U.S. has had its fair share of scandals as well, but its main exchange for young start-up firms, the NASDAQ, has survived. Rather than establishing short-lived trenches for high-risk firms that can be closed when things go wrong, Europe may be better off if it had an exchange such as the NASDAQ that is independent of other exchanges and has the ability to promote itself without stepping on the toes of larger exchanges behind it.

Finally, the retention of highly qualified employees remains a problem in Europe. As managerial compensation in the U.S. far outweighs European salaries and bonus packages, Europe experiences an out flux of management talent to the U.S. Changing the tax treatment of stock option packages to equal that of the U.S. may at least be one step governments can take to close the salary gap and help retain qualified managers on the Continent.

Both the U.K. and the U.S. have seen dramatic increases in the funds raised and invested in private equity and venture capital over the last 15 years.⁵ McGovern (2006) noted that, after a low point in 2003, commitments to venture capital and private equity investments are increasing again. Because of the increased interest in this asset class during the last years, the size of the deals is increasing significantly. As the private equity industry in the U.S. and Europe matures, there is likely to be further interest in emerging markets in the future, particularly Asia.⁶

Furthermore, a maturing industry should lead to the adoption of reporting standards, which would enable investors to compare the performance of different firms. A first

⁵ See Myners (2001) for a detailed discussion of the development of institutional investment in the U.K.

⁶ For a detailed discussion of global trends in private equity investments see PricewaterhouseCoopers (2005).

attempt has been proposed by the EVCA, which recently published a first set of industry standards that provide, among other things, guidelines for valuation, reporting and corporate governance.

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