

Setting the Phoenix Free

A Report on Entrepreneurial Restarters



The Boston Consulting Group (BCG) is a general management consulting firm that is a global leader in business strategy. BCG has helped companies in every major industry and market achieve a competitive advantage by developing and implementing unique strategies. Founded in 1963, the firm now operates 54 offices in 34 countries. For further information, please visit our global Web site www.bcg.com or our German Web site www.bcg.de.



© 2002 The Boston Consulting Group GmbH. All rights reserved.

For information and reprint authorization please contact BCG at the following address:

The Boston Consulting Group
Marketing & Communications/Legal
Ludwigstr. 21
80539 Munich
Germany

Fax: +49 (0)89-2317 4718
E-Mail: marketing.de@bcg.com

CONTENTS

1 FOREWORD	3
2 EXECUTIVE SUMMARY	5
3 WHAT DO WE MEAN BY ENTREPRENEURIAL RENEWAL?	9
4 THE ECONOMIC ADVANTAGES OF ENTREPRENEURIAL RENEWAL	11
5 KEY INGREDIENTS FOR A HEALTHY ENTREPRENEURIAL ENVIRONMENT	15
5.1 BREAKING DOWN REGULATORY BARRIERS	15
5.1.1 Establish clearly defined insolvency laws	16
5.1.2 Reduce bankruptcy discharge periods	21
5.1.3 Create a simple, flexible, and supportive regulatory environment	22
5.1.4 Provide regionally organized advice to restarters and firms in crisis	24
5.2 BREAKING DOWN FINANCIAL BARRIERS	25
5.2.1 Encourage banks to take restarters' track records into account	25
5.2.2 Tax incentives and other initiatives to stimulate private equity investment	26
5.3 BREAKING DOWN SOCIAL BARRIERS	27
6 LEARNING FROM SUCCESSFUL RESTARTERS	31
7 FROM WOE TO GO—REWRITING THE ENTREPRENEURIAL AGENDA	33
8 SAMPLE AND METHODOLOGY	35
8.1 EUROPE'S 500—A SAMPLE OF HIGHLY DYNAMIC GROWTH COMPANIES	35
8.2 THE E500 SELECTION PROCESS	35
8.3 METHODOLOGY	37



1

FOREWORD

The willingness to take risks is an integral part of entrepreneurship. It is often cited as the reason why the rate of business start-ups in Europe still lags behind, for example, the USA. Europe has done a great deal to reduce this first hurdle to reaching entrepreneurship, its efforts focusing on fostering entrepreneurship and encouraging new business formation. The increasing number of insolvencies and business turn-arounds demonstrate that not only risk taking, but also failure, is necessary—and desirable—for an entrepreneurial society. Entrepreneurs who can transcend failure and learn from their experience have proven to be precious assets for their country's economy: they drive growth and they create employment, and they do this more successfully than entrepreneurs who have never failed.

This report analyzes the economic role of entrepreneurial restarters, examines the factors needed to provide an environment in which they can flourish, and analyzes patterns common to successful restarters. It will be useful to entrepreneurs whose goal it is to avert or swiftly recover from business crises. The report also targets public sector and not-for-profit agencies that seek strategic partners and best-practice examples. In addition, it provides the interested layperson with both an understanding of the role business restarters play in generating economic growth and an overview of the interaction between economic and social choices that frame the restarter environment.

The recommendations and best practices in this report result from interviews with successful restarters across Europe. We specifically chose entrepreneurs who succeeded in starting new businesses and who are today owners of fast growing companies. These companies are members of Europe's 500, a group of entrepreneurially led, high-growth firms, identified annually by GrowthPlus, an organization comprised of and created for dynamic entrepreneurs in Europe. GrowthPlus was founded in 1997 with the aim of promoting entrepreneurship throughout Europe by identifying top performers and role models and supporting them by sharing best practices and providing networking opportunities and political lobbying support.

In 1999, the Boston Consulting Group joined forces with GrowthPlus as one of four strategic partners, with the objective of supporting the growth of the organization itself and of gaining deeper insights into the nature of entrepreneurial activity and entrepreneurial growth. Our efforts include generating benchmarks and new insights into Europe's most dynamic entrepreneurs and their companies as part of a broad research program. GrowthPlus makes this information available to other companies pursuing entrepreneurial growth.

We would like to thank all those who participated in this study. First and foremost, our special thanks go to those entrepreneurs who provided us with their personal experiences and insights into how to achieve success after business failure. Without their willingness to share their individual business cases, this report would not have been possible. Special thanks also go to Pieter Waasdorp from the Dutch Ministry of Economic Affairs for initiating and supporting this research project. We would also like to thank the project team from BCG: Holger Odenstein, Susanne Riedler, Nicola Rowe, Oliver Merkel, and Andreas Ziegenhorn. We also acknowledge and extend our appreciation to GrowthPlus for supporting this effort.

Starting anew after a business failure requires almost more entrepreneurial courage and commitment than starting a business for the first time. We believe that every economy is well advised to reintegrate this “entrepreneurial potential” into the business world and that society should tear down unnecessary barriers that prevent restarters from trying again. We hope that this report will contribute to creating more regulatory, financial, and social awareness to close the restarter gap.



Dr. Antonella Mei-Pochtler
Senior Vice President
The Boston Consulting Group



Drs. Jan Willem Oosterwijk
secretary-general
of the Ministry of Economic Affairs

2

EXECUTIVE SUMMARY

Risk taking is an integral part of entrepreneurship, and failure is a necessary, desirable asset to an entrepreneurial society. Entrepreneurs who transcend failure are valuable commodities for a country's economy: they drive growth and create employment, and, as a group, they do this more successfully than entrepreneurs who have never failed. The recent downturn among new economy companies has drawn increased attention to the issue of failure, and numerous national programs to reform insolvency law are evidence that European governments are well aware of the need for action. The Boston Consulting Group studied the economic potential of restarter entrepreneurs and identified the obstacles that would-be restarters face. This report poses and answers a single question: Why should we—and how can we—move from hindering to hatching the phoenix?

Failure is the fuel for growth ...

Entrepreneurs who can learn from failure are more successful than those who have never failed. An analysis of the performance of Europe's 500 fastest-growing companies (the "E500") shows that companies founded by restarters grow faster in terms of turnover and employment than companies run by entrepreneurs who have never failed.

We found that failure is not only significant at the microeconomic level; entrepreneurial renewal (that is, business entries and exits per capita in a given year) is an indicator of a country's overall economic health. The analysis shows that countries with a high rate of entrepreneurial renewal have a high rate of GDP growth and vice versa. Also, high renewal rates indicate a high employment growth rate. We also found that a high growth rate is accompanied by a high rate of entrepreneurial renewal from an industry perspective. The results imply that especially high-growth—but nascent—industries are characterized by trial and error, leading to many entries as well as exits with only the viable business models succeeding.

...if the right lessons are learned

"Phoenix potential," the ability to rise again after business failure, requires the ability to assess the reasons for failure and to learn from mistakes. Based on a series of interviews with restarters among the E500, we identified five key factors for a successful entrepreneurial restart:

1. A successful restart is rarely a solo effort. Restarters should analyze their skill sets, complementing gaps with a team.
2. Entrepreneurial intuition needs to be seasoned with business rationality. This requires the ability to translate an entrepreneurial vision into a viable business plan and proven management system that focus on long-term, sustainable growth.
3. Successful restarters foster transparency and continuously work to professionalize their companies. Open communication channels within the firm encourage a constant flow of information between all hierarchical levels. Financial reporting is state of the art and an efficient internal controlling system is in place.
4. Remuneration structures reflect a close alignment of owner, employer, and employee interests: compensation, which does not have to be exclusively financial, reflects sharing risks and rewards.
5. Successful restarters devote a significant amount their time to key relationships, both with direct partners—customers, banks, suppliers—and with the community.

Barriers to entrepreneurial restart should be abolished

The study demonstrates that considerable regulatory, financial, and social barriers impede the swift entry, exit, and reentry of companies in Europe.

Regulatory barriers. Regulatory barriers in Europe affect market entry, market exit, and the turnaround time between an entrepreneur's failure and restart. Starting a business in Europe is costly and time-consuming. Inflexible employment laws preventing company size from fluctuating with market demands act as another disincentive to entry. Along with industry subsidies, these laws also decelerate market exits, fostering industry stagnation.

The length of discharge after bankruptcy is the key legal factor affecting the turnaround time between failure and restart. An extended turnaround time constricts the size of the entrepreneurial pool available to any given country. Based on the economic performance of the restarter entrepreneurs in our sample, the length of bankruptcy discharge should be as short as absolutely necessary. This will enable rapid reintegration of the entrepreneurs into the economic process. A comparison with the United States shows that this period of entrepreneurial idleness for European restarters is fairly long. Even among European countries, this period of idleness varies greatly in length. Most of the English-speaking world is already ahead of continental Europe in terms of having short discharge periods, and is moving to reduce these periods even further.

Financial barriers. We found that access to capital can be particularly difficult for European restarters. Two main reasons account for this: First, European firms rely more on bank financing than do United States

firms. This puts failed entrepreneurs at a disadvantage, as they frequently cannot provide the security that banks require. Moreover, new economy firms tend to have a high proportion of intangible assets that cannot be easily borrowed against or represented on a balance sheet. In addition, banks have not sufficiently developed programs for identifying good restarter risks. Instead, banks slot restarters into the same risk evaluation matrices used to assess business credit applicants in general. This results in the key predictor of phoenix potential—the ability to learn from failure, going unrecognized. Banks treat restarters with and without insight alike, failing to differentiate according to the very different risks they pose.

Second, the secondary capital market in continental Europe is still fairly underdeveloped. Twice as much venture capital, expressed as a proportion of GDP, is available in the United States and United Kingdom than in continental Europe. The informal secondary capital market, essentially the market for angel investments, functions particularly poorly. The market is not transparent, and personal networks largely drive contacts between angels and entrepreneurs.

Social barriers. Our interviews with entrepreneurial restarters underscore the reality that failure is still severely stigmatized in Europe. In marked contrast to the U.S., there is no general public perception in Europe that failure is a necessary precondition for success. Failure—even when followed by success—is a mark of shame, not a badge of honor.

Stigma is contingent upon sociocultural factors that vary from country to country and can most sensibly be tackled at the country level. Previous research has shown that the stigma attached to failure prejudices the likelihood of market entry, discouraging potential entrepreneurs from founding businesses from the very beginning. At the same time, the stigma attached to admitting capital business mistakes acts as a strong disincentive for entrepreneurs to cut their losses, exit, and begin again.

Our research shows that stigma is also contingent upon the business context of failure. Industry maturity and enterprise age are the two significant predictors of stigma: failing in a mature industry as an incumbent is more shameful than failing in a nascent industry as a start-up. In nascent industries the degree of uncertainty is high and successful business strategies have not yet been established. Young start-ups have far fewer fixed assets and committed structures, which makes it easier, and perhaps less painful, for their founders to redirect their entrepreneurial effort.

Five recommendations to help restarters

Based on our interviews with entrepreneurs and experts from financial and legal institutions, BCG recommends taking concerted action to improve the environment for restarters in Europe. As this report will explain in detail, special attention should be given to the following five issues:

1. Adopt a prioritized best practice regulatory improvement program
2. Create a “best restarter” network
3. Launch a “best restarter” campaign
4. Establish a “best restarter” venture capital fund
5. Endow a “best restarter” award



3

WHAT DO WE MEAN BY ENTREPRENEURIAL RENEWAL?

Our basic premise in examining business failure follows Schumpeter’s concept of creative destruction: the “new” can only emerge at the cost of destroying the “old”. Hence, we sought to measure the general degree of “destruction” in a given economy or sector. To do so, we adopted the measure of “turbulence”, defined as the sum of business entries and exits in percent of total business stock in a given year. Turbulence provides a good indication of business turnover in a given economic setting, but it does not provide information about the level of entrepreneurship as a whole.

To account for this general level of entrepreneurship, we weighted the level of turbulence by the number of businesses per capita. This gave us entrepreneurial renewal, a measure of the degree to which dynamic entrepreneurship characterizes a country’s business landscape.

ENTREPRENEURIAL RENEWAL VARIES WIDELY ACROSS COUNTRIES

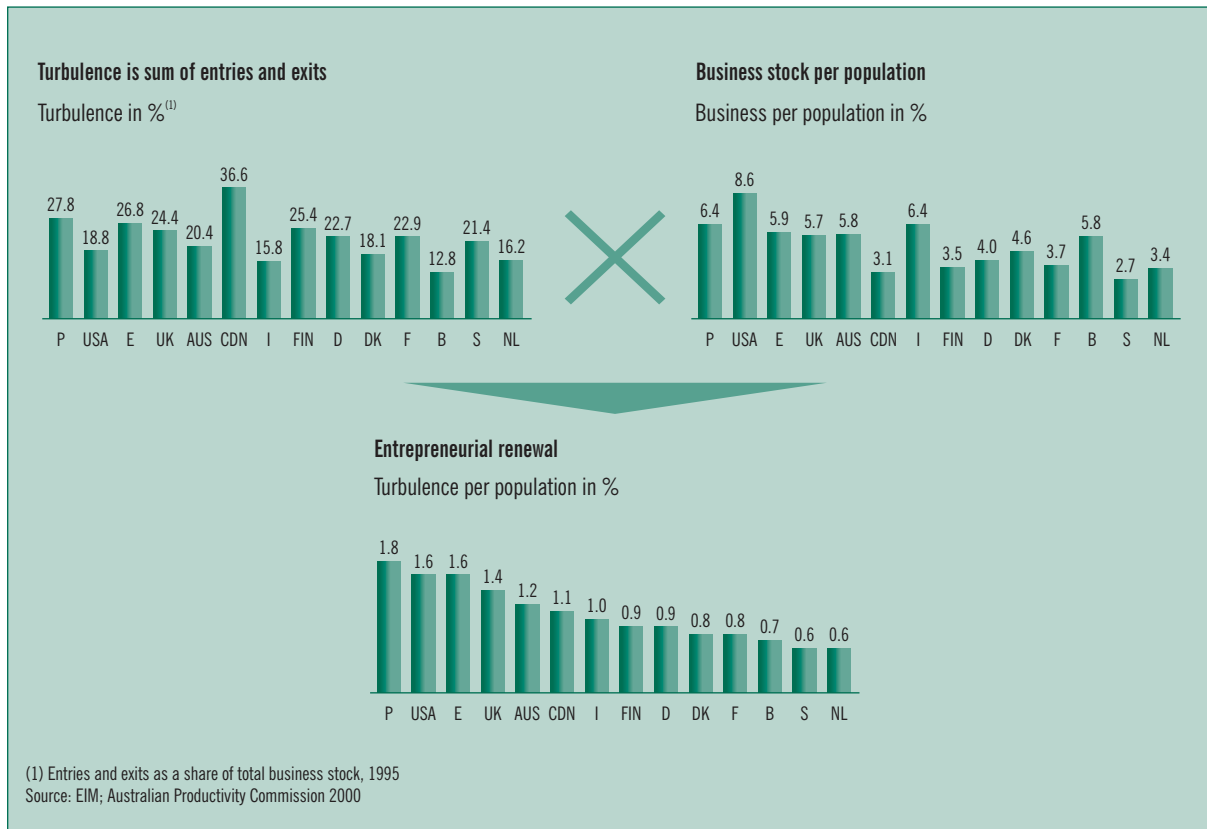


Fig. 1



4

THE ECONOMIC ADVANTAGES OF ENTREPRENEURIAL RENEWAL

Entrepreneurial renewal is a reliable indicator of economic health both at national and at sector levels. Our analysis reveals two important correlations: first, growth is strongly driven when entrepreneurship is dynamic rather than static—that is, when business activity is characterized by a high degree of market entries and exits; and, second, a high level of entrepreneurship is a necessary precursor to growth. Thus, for example, Germany’s low entrepreneurial renewal rate of 0.9 percent in 1995 corresponded with a low 1.3 percent GDP growth for 1995/96. In contrast, renewal in the United States was a much higher 1.6 percent, corresponding with a high 3.4 percent GDP growth rate during the same period.

ENTREPRENEURIAL RENEWAL DRIVES GDP GROWTH

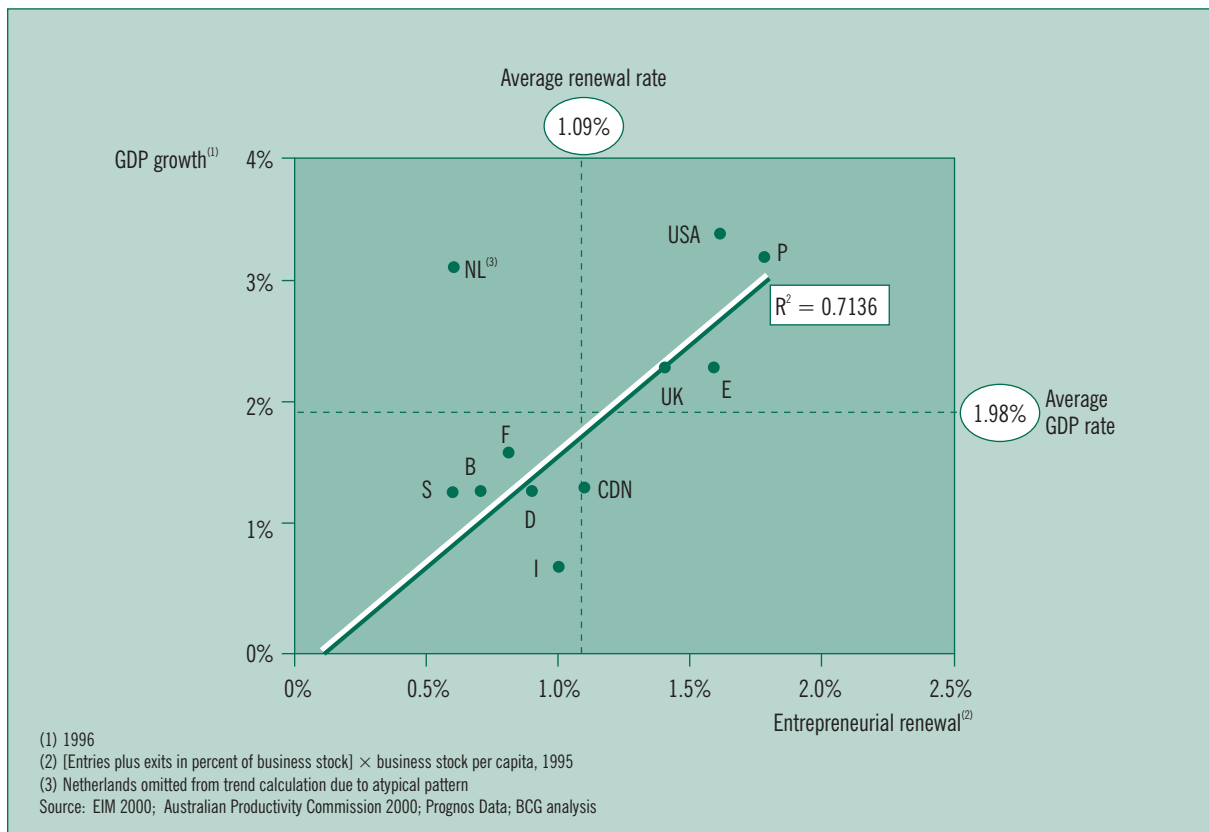


Fig. 2

We found a similar pattern at the sector level: from an industry as well as national perspective, high growth and high renewal go hand in hand. During the 1990s, for example, the Dutch communication industry recorded 7.5 percent industry growth (compound annual turnover growth), with renewal rates rising from

9.5 percent in 1992 to 49 percent in 1997. The computer industry, in contrast, was experiencing a slow-down: a growth rate of merely 0.5 percent accompanied a plunge in the industry's rate of renewal, which fell from 48.6 percent in 1992 to 23.3 percent in 1997.

The growth resulting from entrepreneurial renewal becomes particularly evident when assessed through the lens of job creation. We found that countries like the U.S., Portugal and Spain, which showed above-average rates of renewal, created jobs more successfully than countries with low rates of renewal. In the U.S., for example, a renewal rate of 1.6 percent in 1995 corresponded with a high employment growth rate of 1.9 percent the following year. Similarly, in Portugal 1.8 percent renewal rate in 1995 foreshadowed a 1.6 percent increase in jobs in 1996. The reverse can also hold true: in Sweden a low renewal rate of 0.6 accompanied negative employment growth of -0.6 for the same period.

ENTREPRENEURIAL RENEWAL CREATES MORE JOBS ...

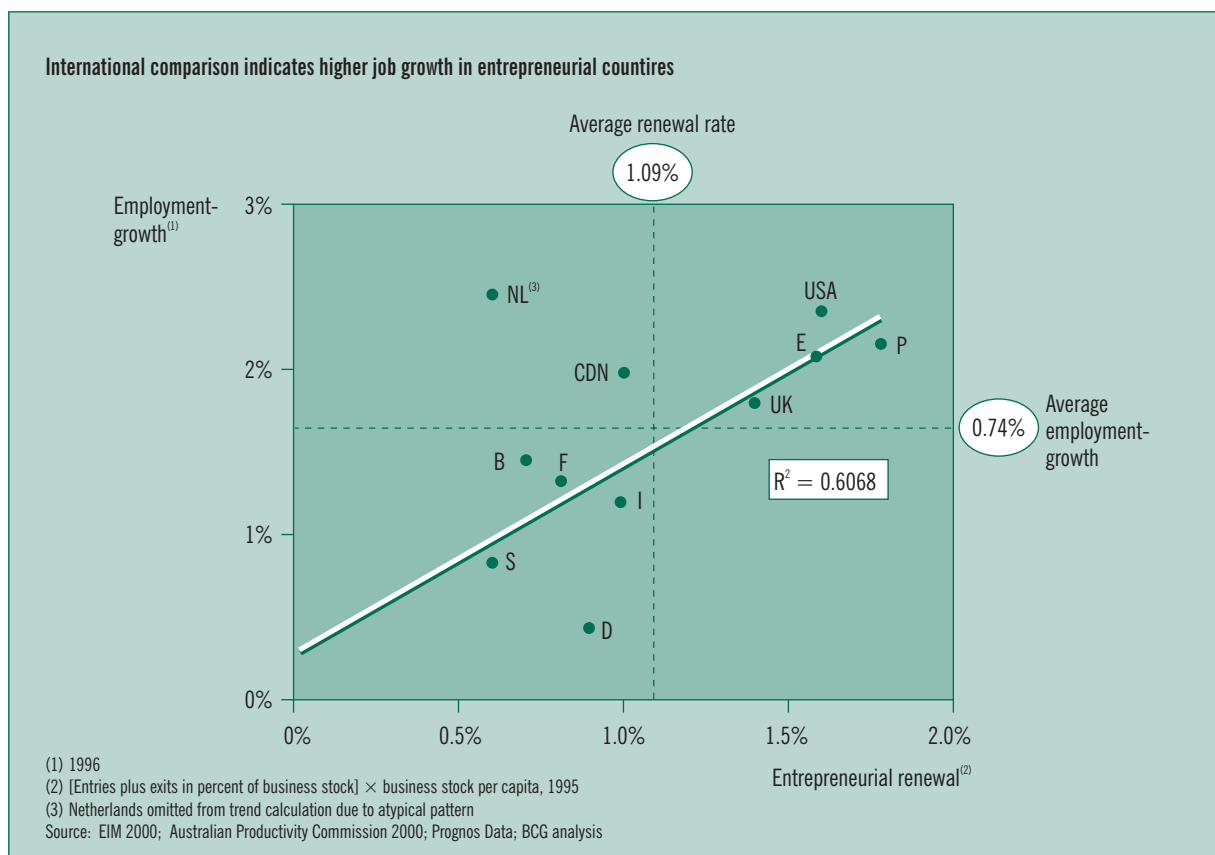


Fig. 3

We omitted the Netherlands from the trend calculations due to an atypical pattern in employment growth. One reason for this pattern is the system of wage moderation introduced because of the high unemployment rates in the late 1970s; this action led to an above-average increase in employment over the following years (source: Dutch Ministry of Economics).

Analyzing the performance of the E500, Europe’s most dynamic entrepreneurial companies, reveals that companies founded by restarters grow faster in terms of turnover and employment than companies run by entrepreneurs who have never failed: from 1993 to 1998, companies founded by restarters showed 47 percent annual turnover growth compared to the 41 percent annual turnover growth recorded by companies whose founders had never failed. Even more notably, companies founded by restarters showed 37 percent annual employment growth over the same time period, a 14 percentage point lead over the 23 percent annual employment growth recorded by companies whose founders had never failed. One reason for this phenomenon is that entrepreneurs predominantly restart their businesses in the service industry, which requires less capital but is often more people intensive.

E500 RESTARTERS GROW FASTER

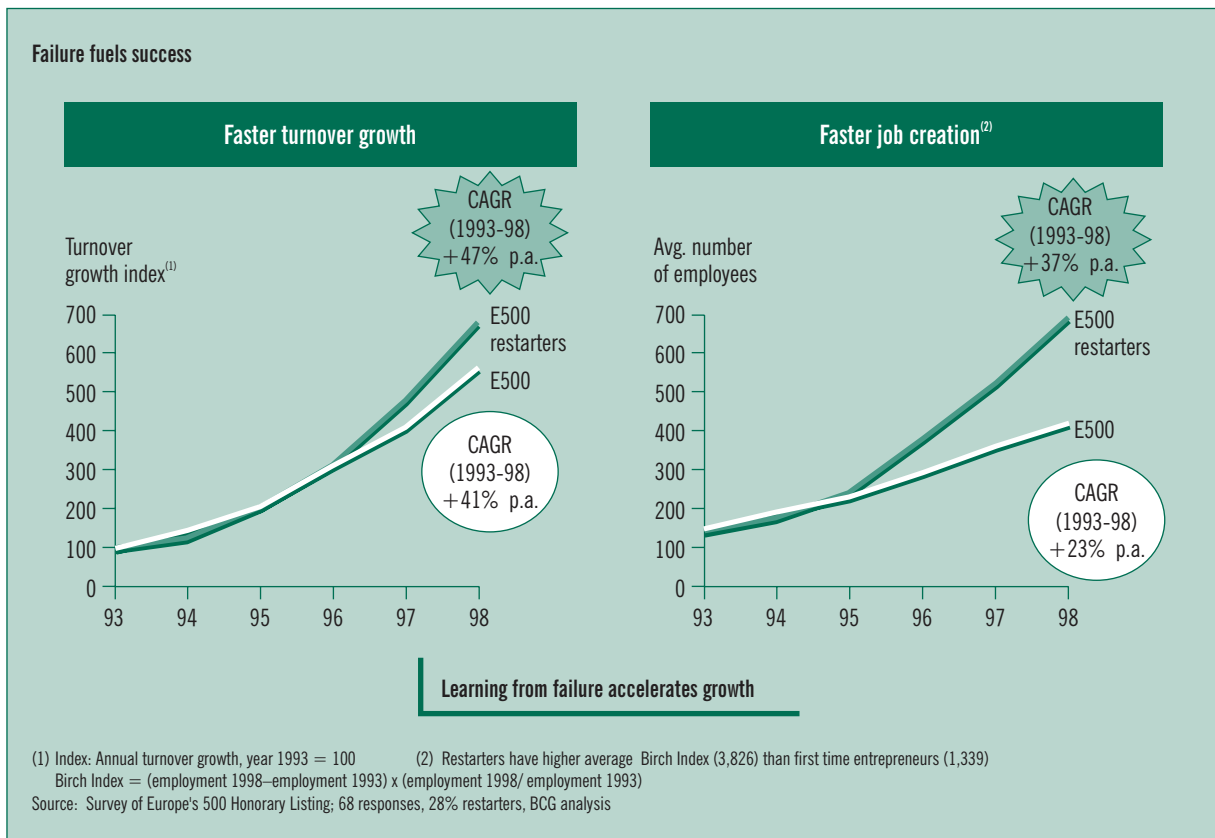


Fig. 4

As we will soon see, it is no accident that job growth is high in those countries where the population is entrepreneurially active and the entrepreneurial landscape is dynamic. Where market exits pose no threat to market reentry, restarting entrepreneurs are able to lever past learnings swiftly and directly, providing jobs, driving growth, and creating wealth.



5

KEY INGREDIENTS FOR A HEALTHY ENTREPRENEURIAL ENVIRONMENT

We have observed that a high degree of entrepreneurial renewal is one of the drivers of economic growth. We have also seen that entrepreneurs who reenter the market after failure create particular value within the economics they operate. Analysis of the broader context within which failure and reentry take place indicates several barriers that impede the swift entry, exit, and reentry of businesses in Europe. Not all barriers can be tackled on a national or regional level. Our research shows that concerted action—extending to the pan-European level—will be necessary to enable failed entrepreneurs to realize their “phoenix potential.”

We have identified three factors influencing the degree to which a country is “restarter friendly”:

- the **regulatory framework**, which determines in legal and administrative terms how easily entrepreneurs can enter the market, maneuver in crisis, and then exit and reenter the market
- the **financial environment**, which determines how easily and at what terms and conditions entrepreneurs can obtain capital to finance their restart
- the **social context**, which determines the general attitude in a society towards risk and the stigma attached to failure

While we have determined that the environment in most European countries is not conducive to successful entrepreneurial renewal, we have been able to identify isolated best practices which, if disseminated more broadly, would markedly improve the degree to which restart is possible.

5.1 Breaking down regulatory barriers

The regulatory framework within which entrepreneurial activity takes place affects restarting entrepreneurs at four key points during the entrepreneurial life cycle: market entry, crisis management, market exit, and market reentry. Within each country’s broad regulatory framework, we have identified four levers with which governments can facilitate an environment friendly to restarters: insolvency law, length of bankruptcy discharge, regulatory complexity, and availability of advice to restarter firms in crisis.

5.1.1 Establish clearly defined insolvency laws

European trend towards debtor-oriented insolvency system

Insolvency law aims at balancing the competing interests of debtors and creditors, thereby influencing both entrepreneurs' readiness to enter and reenter the market and creditors' willingness to lend.

Insolvency systems can be characterized as debtor-oriented—debtors have free choice when to enter insolvency, they maintain a high level of control during the insolvency process, and they experience swift rehabilitation after bankruptcy, or creditor-oriented—creditors' claims are not automatically stayed, creditors are paid according to a hierarchy of secured credit, and debtor control of the organization is low, with high creditor control over management.

Neither system has a clear advantage over the other, although a trend towards debtor-oriented insolvency law is evident in Europe. Debtor-oriented insolvency clearly facilitates an entrepreneurial society: it encourages initial and repeat participation in the market. Since it creates a less attractive credit environment, however, it may lead to credit rationing, retarding smaller entrepreneurs' access to credit. Creditor-oriented insolvency has a different effect: it increases productivity and encourages entrepreneurs to manage prudently. However, since creditor-oriented insolvency supplies creditors with the means to liquidate easily, firms in crisis may be forced into premature liquidation even where rescue is possible. Premature liquidation may be a particular problem for new economy firms: since their intangible assets are difficult to incorporate into a traditional balance sheet, credit tends to be secured against tangible assets. These assets form only a small proportion of new economy firms' value, so lenders in creditor-oriented systems may acquire disproportionate leverage to force new economy firms into liquidation.

We found that the policy choice between creditor- and debtor-oriented insolvency has far less economic impact on the entrepreneurial climate than the degree to which one of these systems is adopted. Most insolvency environments incorporate a mixture of debtor- and creditor-oriented elements. Systems that are clearly weighted towards either debtors or creditors, and within which less effort has been made to reconcile competing interests through complex legislation, have outcomes whose predictability is higher than systems that have taken elaborate measures to balance competing interests. Where outcomes are predictable, risk assessment for individual entrepreneurs is easier. For example, the percentage of adults acting as informal investors in start-up companies rises with the clarity of a jurisdiction's orientation towards either debtors or creditors.

Another finding shows that the more debtor-oriented the system, the lower the unemployment rates. These numbers imply that employment in debtor-oriented systems can be shifted more quickly and easily to new business opportunities and that the social costs of liquidation are, in the long run, lower than the future costs of a "failed" reorganization.

Identifying best practice examples

While all modern insolvency systems follow one basic pattern, national courts and legislatures can and do exercise different kinds of influence on the discrete stages of the insolvency process. This results in structurally similar systems appearing quite different in practice.

When deciding the features of a national insolvency framework, courts and legislatures must weigh three considerations:

- One, courts and legislatures regulate the point at which candidates for insolvency progress from one node to the next by varying the formal requirements for progression and by weighting the material threshold at which any given progression point is reached.
- Two, in determining the participants who have formal standing to be heard in bankruptcy processes, courts and legislatures can select from several stakeholders, the admission or exclusion of whose voices will affect the outcome of a given process.
- Three, and perhaps most important, courts and legislatures can—and indeed must—give greater weight to the interests of those stakeholders whose voice they decide should be heard.

National courts and legislatures necessarily make all three of these decisions every time they stipulate the criteria under which progression from one stage of the insolvency process to the next is permissible. The interplay of these three considerations along the stages of the insolvency process is the reason why structurally similar insolvency systems appear so dissimilar in practice. We compare the insolvency laws of the United Kingdom with those of France, the United States, and the Netherlands to provide an example of dissimilarity in practice despite similarity in structure.

Insolvency law and practice in the United Kingdom

Formal moment of crisis. A firm formally enters into crisis, and is said to be insolvent, at the point at which it is no longer able to pay its debts or at the point at which its liabilities outweigh its assets.

Decision whether to liquidate or reorganize. An insolvent firm may be liquidated (either voluntarily or pursuant to court order), placed into receivership (subjected to the authority of a receiver to recover creditor funding) or dissolved. Two modes of reorganization are possible:

- **Reorganization under statute.** At the application of either debtors or creditors, a court may place a firm under an administration order, appointing a manager either to wind up the firm and realize its assets or to reorganize it and enable it to continue trading. The administration order confers protection from creditors.

- **Informal reorganization under the London Approach.** Despite the procedures laid down by statute, reorganization and winding up in England and Wales tend to occur pursuant to an unwritten, flexible set of guidelines that lack legal status. Devised in the 1970s by the Bank of England, the “London Approach” encourages creditors to work together rather than enforce claims formally through the courts. The Approach, which encapsulates norms of practice for multicreditor corporate insolvency or illiquidity, has three objectives: minimize loss to banks and other creditors, avoid unnecessary receivership or liquidation and therefore preserve jobs, and preclude the failure of rescue packages owing to creditor dissent

Best practice involvement of central bank. While the Bank of England has no formal remit for involvement in insolvency proceedings, it has been involved in corporate restructuring, perhaps uniquely among European central banks, since the 1920s. Although the Bank reduced its direct involvement during the 1990s, it remains the most pronounced example we have found of a response to the universal need for an authoritative mediator to work with creditors—and, where appropriate, with debtors—towards practical solutions, averting or minimizing the hard landing which precedes restart.

Typically, the Bank would act as a catalyst and generalist, persuading some banks not to call in loans, convincing others to provide bridging finance, and identifying qualified executives to take over management of the company. Yet the London Approach is not binding, and therein lies its weakness: reliant not on legal but on moral authority, the Bank cannot force unanimity among creditors. Nor does the Approach provide formal debtor protection: while negotiations proceed, firms are subject to the depredations of secondary or minor creditors not invited to the roundtable.

The London Approach is thus striking in three respects:

- It is an example of creditor-driven innovation as opposed to innovation with legislative reform roots.
- It represents an unprecedented and proactive stance by a public-sector institution.
- It reflects a triumph of pragmatism over legal norms: legal procedures, though in place, are overwhelmingly ignored in favor of the Approach.

Insolvency law and practice in France

French insolvency is notable both for the role of third parties as mediators and investigators and for the weighting of its overarching, tripartite goal: salvaging firms in crisis, protecting employees’ jobs, and satisfying creditors’ claims.

Formal moment of crisis. Company auditors are obliged to notify a firm’s directors (and, if they fail to act, the workers’ council and the president of the local commercial court) if they believe that the company is in crisis. Generally signaled by auditors, a company’s workers’ council or its managers may also recognize

the formal moment of crisis. If the firm is simply having difficulty, its leadership may apply for a negotiated settlement; if it has actually stopped payments of debts, its creditors are entitled to apply for the institution of insolvency proceedings.

Negotiated settlement. If a firm is in financial, economic, or legal difficulty, its directors—and only its directors—may apply to the court for a negotiated settlement. A neutral third party is generally appointed to mediate: his or her task is to try to reconcile debtors' and creditors' interests within three months in a way that is acceptable to both parties. Since the mediator is entitled to apply to the court for a moratorium on debt collection, there is a clear incentive for directors to apply for a negotiated settlement.

Decision whether to liquidate or reorganize. Creditors, debtors, the public prosecutor, or, more rarely, a court may lodge an application for insolvency proceedings to be instituted in cases where debt payment has ceased or where a firm's currently due liabilities outweigh its readily fungible assets. The court appoints a supervisory judge and a judicial receiver as well as a workers' representative (whose job is protected) and a creditors' representative. The firm generally remains under its management's control, although the judicial receiver has wide-ranging powers to approve or veto actions. Unless it is clear that the firm cannot be saved, an observation phase begins during which a moratorium on debt collection is imposed and the firm is investigated to determine the economic and social impact of continuation and liquidation. After the observation phase the court reconvenes to consider a reorganization or liquidation plan; its decision must give weight to salvaging the firm, protecting employees' jobs, and satisfying creditors' claims; where these claims compete, as they are likely to do, they are to be weighted such that the interests of the firm and of its employees trump those of its creditors. Where the court opts for reorganization (as it must, if it appears that the firm can be salvaged as a going concern), it has broad powers to intervene in the firm's financial and management structure. Even in cases where it orders liquidation, it is required to do so in a way that respects competing interests in the order given above: thus, liquidation may be ordered only in part.

Distinctive character of French insolvency law. Employees' interests enjoy considerable weight throughout the French insolvency process: the workers' council is entitled to signal a formal crisis; it must be notified if management fails to respond adequately to an auditors' warning; and, most significantly, workers' council interests have highest priority—even greater than creditors' interests, when the decision whether to liquidate or reorganize the firm is made.

Insolvency law and practice in the United States

Formal moment of crisis. A firm may seek the protection of Chapter 11 of Title 11 of the United States Code at any time in order to reorganize to better meet its financial obligations. A Chapter 11 filing triggers an automatic stay of claims against the firm. The directors remain in day-to-day control, operating as the creditors' fiduciary: only if management is dishonest or incompetent will the court appoint a trustee. Thus, the directors generally carry on the normal course of business, concluding and fulfilling contractual obligations to employees, customers, and suppliers. Within three months, (a period that the court may extend), directors must lodge a reorganization plan. The plan requires the approval of a qualified majority of creditors. If it is approved, all debts for which repayment has not been agreed are discharged, and the company may continue to trade normally.

Liquidation. Both directors and creditors may apply under Chapter 7 of Title 11 for liquidation of the firm's assets. A Chapter 7 filing is a straightforward bankruptcy in which no reorganization is contemplated. A court-appointed trustee liquidates assets and distributes the proceeds among creditors.

Discharge of bankruptcy. The United States not only provides the best-practice example: it also is the bellwether for the pragmatic, entrepreneurial-oriented approach to bankruptcy typifying the last decade of European reforms. Three aspects of United States best practice should be underscored:

- On an operational level, the United States bankruptcy process has the strongest debtor orientation of all the jurisdictions studied. The point at which application for protection or insolvency may be made is left largely in the hands of directors. No disincentives to enter reorganization exist: a firm's directors have control over both the point at which they seek Chapter 11 protection and over the firm's affairs while that protection holds.
- The consequences of a concomitant individual bankruptcy are minor: its duration is short, and generous exemptions mean that its direct effects are comparatively mild. The bankruptcy is discharged once company directors complete administrative procedures, generally in less than half a year. The bankruptcy process, then, constricts the size of the entrepreneurial pool to the least extent possible.
- Federal law provides generous exemptions on the quantity of personal property exempt from creditors' claims. Individual states determine the value of additional exemptions. Thus, for example, the \$1 million homestead exemption in Texas not only reduces the impact of bankruptcy for an individual entrepreneur but also enables him or her to insure personally against the effects of business failure by diverting assets into personal real property.

Insolvency law and practice in The Netherlands

Formal moment of crisis. Debtors who can see a point approaching when they will be unable to pay debts are entitled to apply for a moratorium on payments (*surséance van betaling*). Debt protection is automatic but carries stringent conditions: the moratorium is available for only a year and a half, must be lifted on the application of a qualified minority of creditors, and must be accompanied by a reorganization plan. The environment created is less attractive for the debtor than that created by the United States' Chapter 11 protection legislation, and debtors apply for *surséance* less frequently than for insolvency. A firm may be declared insolvent on application in cases where the firm has ceased payment of significant outstanding debts; the test is direct and it does not suffice simply to show that the firm's liabilities outweigh its assets. Thus, firms whose assets are largely intangible are not disadvantaged in comparison to "brick and mortar" businesses with greater tangible asset bases.

Debtor rehabilitation. This new approach to insolvency law in the Netherlands provides a clear example of a European trend towards shortening the length of bankruptcy for private individuals. This is a marked departure from the traditional Dutch approach, which for most of this century completely excluded the discharge of bankruptcy unless debtors repaid creditors or reached a settlement with them. Debtors now

reach agreement, either with their creditors or with the court, to pay off as much debt as possible on an agreed upon schedule existing over a period of three to five years. If the agreement is kept, their debts are deemed clear and their creditors' claims, which are the main economic disincentive to rejoin the entrepreneurial pool, dissolve.

As the following chapter demonstrates, shortening the length of bankruptcy discharge has the positive effect of decreasing the time entrepreneurs are removed from the entrepreneurial talent pool from which a society may draw. As the Netherlands amended its insolvency legislation in 2001, a statistical evaluation of its effect on potential restarters will not be possible until the middle of this decade.

5.1.2 Reduce bankruptcy discharge periods

The period of time until bankruptcy is discharged is the most important legal influence on the length of time between failure and restart. At any given moment, a certain percentage of a country's entrepreneurial talent is kept from entrepreneurial activity by undischarged bankruptcy. By reducing bankruptcy times, governments can liberate restricted entrepreneurial talent, allowing the pool of available entrepreneurs to refill more quickly.

QUANTIFIABLE CONSTRICTION OF ENTREPRENEURIAL POOL THROUGH LONG BANKRUPTCY TIMES

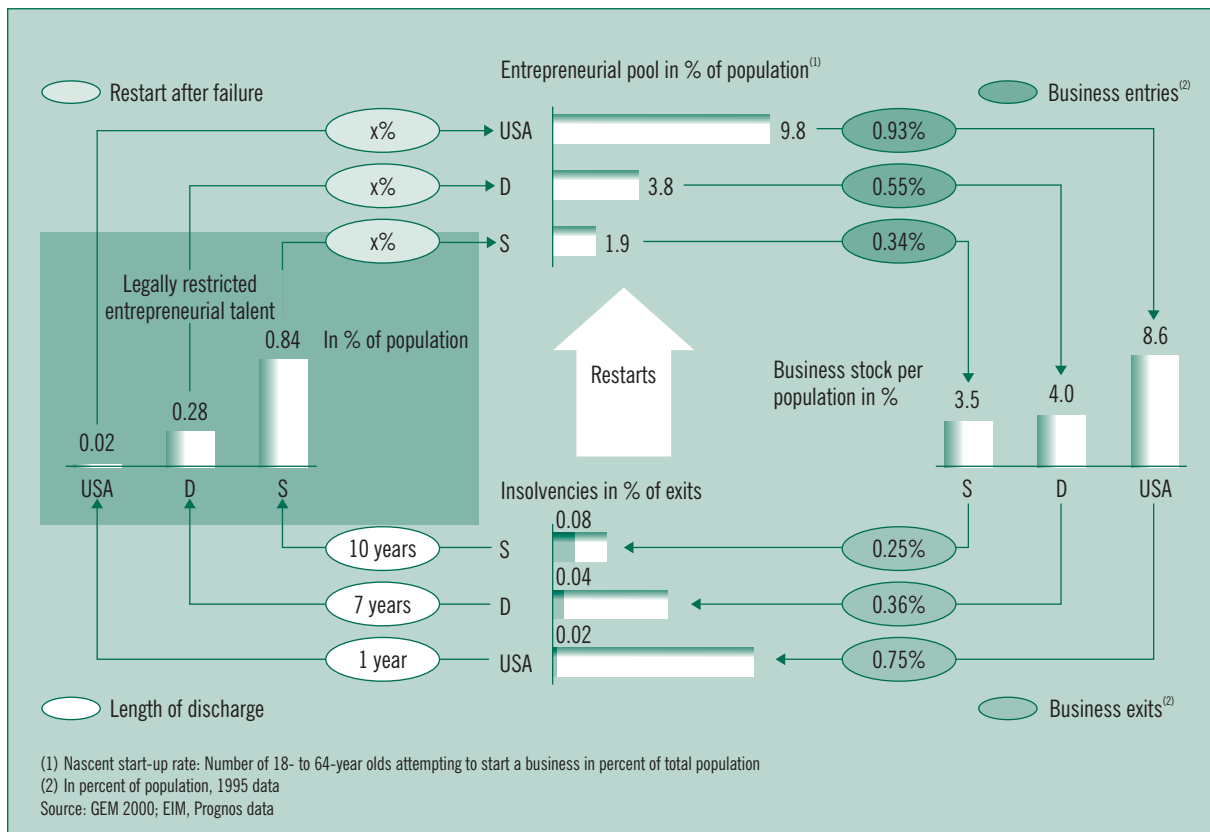


Fig. 5

We note a European trend toward a rational, pragmatic approach to bankruptcy in which the focus is less on moral stigma and more on rapid reintegration of the insolvent entrepreneur into economic life. In particular, Scandinavian countries have taken innovative steps towards flexible bankruptcy discharge times tailored to each debtor's individual situation. While the standard length of bankruptcy discharge still varies widely across Europe—ranging from ten years in Iceland to seven years in Germany to three years in the United Kingdom—it has been falling steadily for the last fifteen years and will fall further. It still, however, lags some distance behind the United States where bankruptcy is generally discharged in less than a year.

Excessively long bankruptcy discharge times impede entrepreneurial activity by preventing the entrepreneurial talent pool from refilling. Given the superior potential that we have identified among restarters, governments should shorten bankruptcy times as sharply as possible in order to maximize the entrepreneurial talent available among restarters and thus drive macroeconomic growth.

ENABLE A SWIFT TURNAROUND: REDUCE BANKRUPTCY TIMES

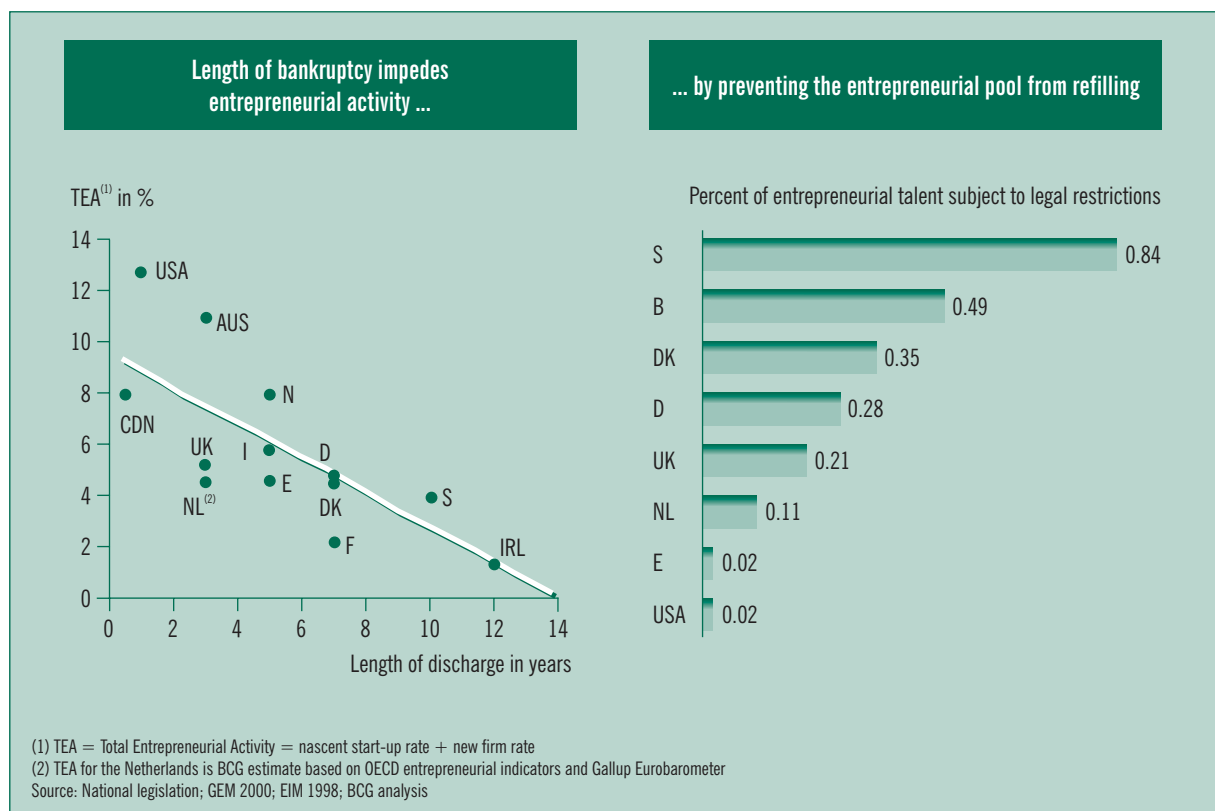


Fig. 6

5.1.3 Create a simple, flexible, and supportive regulatory environment

Keep red tape to an absolute minimum for start-ups

Entering the European marketplace is an expensive, time-consuming undertaking. On average, it takes 63 days and nine separate procedures to start a business in Europe, equivalent to a cost of 0.14 percent of GDP per capita (1997). We can consider Canada to have best practice in this respect: only two procedures are required, on average entailing start-up costs of only a tenth (0.014 percent of GDP per capita) the overall European average.

Red tape not only leads to start-up costs but impedes start-ups altogether. As the graph shows, countries with the most complex regulatory conditions, such as France and Belgium, tend to have the lowest rates of entrepreneurial activity.

REGULATORY COMPLEXITY: A BARRIER TO ENTRY



Fig. 7

Introduce more flexible employment laws

Inflexible employment laws prevent businesses from responding rapidly to market fluctuations and crises. Coupled with industry subsidies they also decelerate market exits, leading to industry stagnation. According to the OECD index of “strictness,” Europe’s employment laws are especially rigid relative to the United States’. On average, European laws are five times more rigid than American laws. In some instances, as with Portugal, laws are significantly more strict.

The quotes below indicate that a rethinking of employment laws has begun to gain ground. A public debate on the merits of more flexible employment laws will be necessary for building an entrepreneurial society.

“For an economy experiencing rapid technology advancement, we should strive to maintain the flexibility of our labor and capital markets.”

Alan Greenspan, United States Federal Reserve chairman

“Europeans are just discovering the need for labor flexibility.”

Jon Chait, Manpower managing director, Europe

“For some, flexibility stands for easy hire and fire. That is not my view ... reforms should improve welfare and job security.”

Oscar Lafontaine, then-German minister of finance, February 1999

5.1.4 Provide regionally organized advice to restarters and firms in crisis

Providing advice for entrepreneurs in crisis is fertile, untilled ground for government action. Currently, entrepreneurs in crisis have nowhere to turn and restarters have no ready access to a forum in which their specific needs can be addressed. Perceived as a neutral third party, the public sector has the credibility to bring various stakeholders together in times of crisis and provide a mediated forum in which banks, suppliers, tax authorities, employees, and management can develop solutions that meet stakeholders' needs more adequately than legal action would. We believe these centers should be definitively regional, since local authorities' strong networks render them credible, accessible, and informed partners for stakeholders in endangered firms.

The public sector can offer direct help to restarting entrepreneurs as well: it can facilitate contact between restarters, making their knowledge mutually accessible, and it can provide links to programs tailored to restarters' funding and training needs. These, too, are tasks for the regional level, since this kind of support can be best carried out with an awareness of the local business environment.

Our interviews with legal experts indicate that changes in national insolvency laws and the growing number of insolvencies require a new approach to insolvency. The roles and qualifications of the institutional crisis managers need to be rethought. Crisis managers should be more than simply creditors' agents: they should support entrepreneurs earlier—before full-blown crises arise. To fulfill this role crisis managers require a new set of business skills, ideally defined by pan-European standards.

5.2 Breaking down financial barriers

In Europe, it can be particularly difficult for failed entrepreneurs to obtain access to both primary and secondary capital markets to find funding for new business ventures. The solution lies in creating awareness of restarters' superior potential within the financial community and in creating attractive incentives for private investment in restarters' ventures.

5.2.1 Encourage banks to take restarters' track records into account

In general, European small and mid-size enterprises (SMEs) tend to be undercapitalized and therefore rely more heavily on bank financing than their United States counterparts. The preponderance of bank financing disadvantages restarters.

FINANCING: A MAJOR HURDLE FOR RESTARTERS

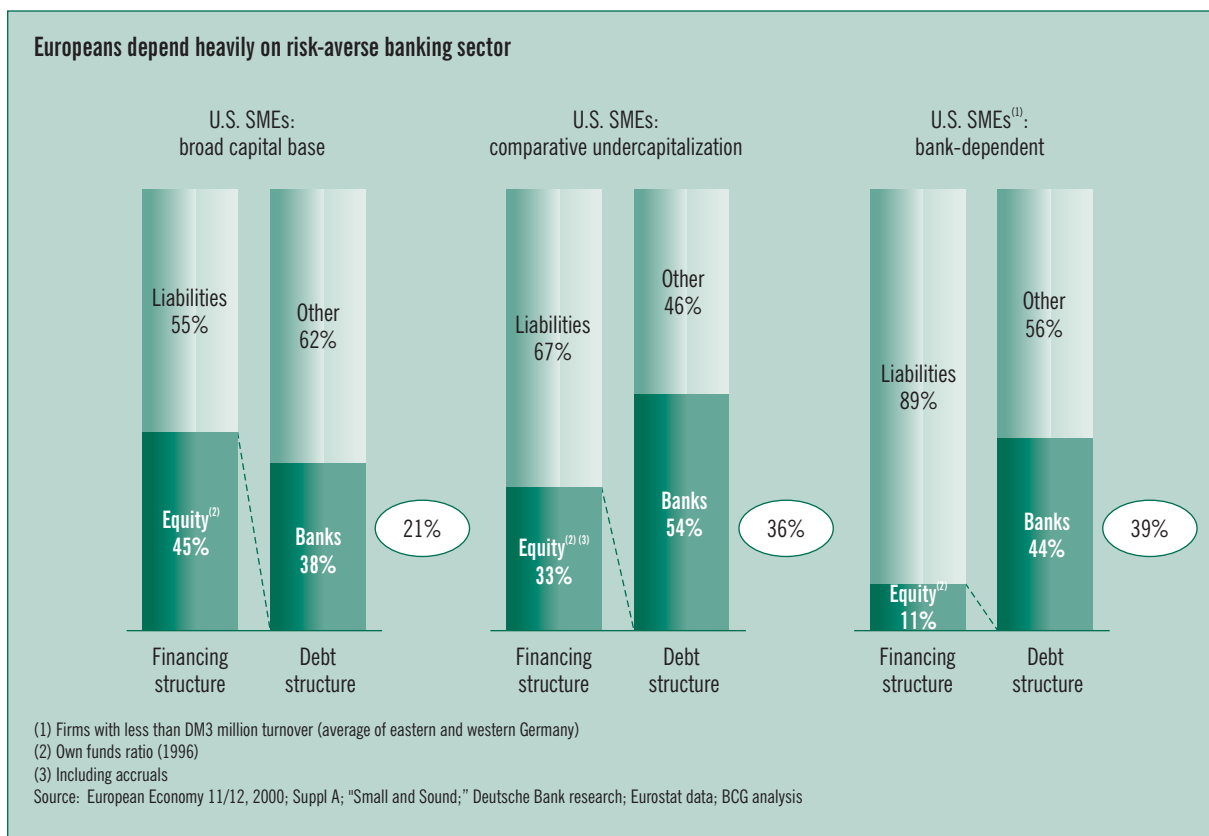


Fig. 8

First, many entrepreneurs whose first businesses failed were bankrupted, losing the assets that banks use as security for a loan. Frequently, then, restarters do not meet the first hurdle—the formal requirements to have enough assets to obtain primary financing.

Second, even those entrepreneurs who can provide sufficient security, and hence fulfill the formal requirements for bank financing, are disadvantaged by the failure of the banking sector to allocate an appropriate risk weighting to their experience of failure. As we have seen, the ability to realize phoenix potential depends on the ability to identify the causes of failure and methodically counter these causes when planning a restart venture. It is the ability to learn from failure that distinguishes true phoenixes from other restarters (and, indeed, from entrepreneurs who have never failed). Yet banks treat restarters with and without insight alike, failing to differentiate according to their very different risk profiles. Interviews with banks revealed that the primary criterion for deciding whether or not to extend credit is the strength of an entrepreneur's business plan. Previous failure is not always seen as relevant, but, where it is taken into account, it is uniformly viewed as negative.

5.2.2 Tax incentives and other initiatives to stimulate private equity investment

Whether their prior business experience includes failure or not, European entrepreneurs generally suffer from the underdeveloped nature of the secondary capital markets, particularly in continental Europe.

VENTURE CAPITAL IN EUROPE IS STARTING TO CATCH UP

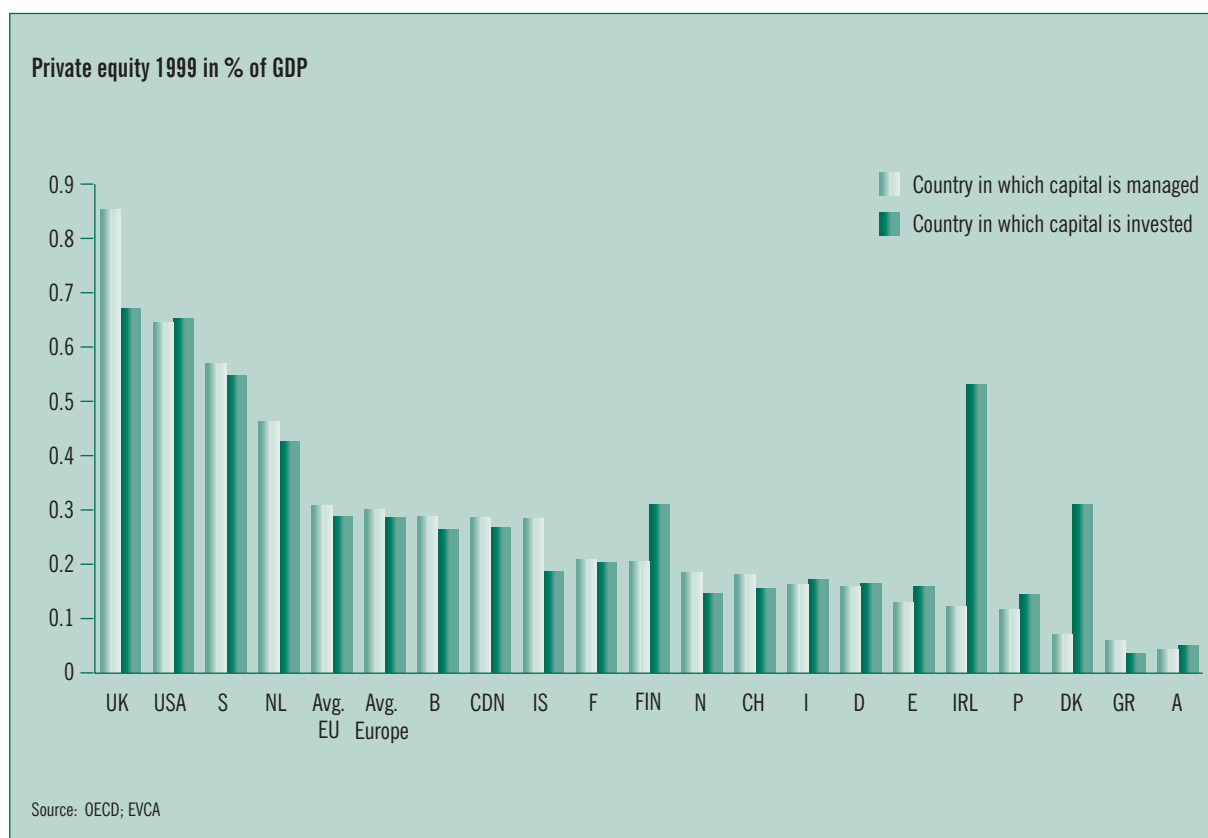


Fig. 9

Within Europe's secondary capital market, the market for informal secondary capital—essentially the market for angel investment—functions especially poorly and is particularly opaque. On average, private equity accounts for about 0.3 percent of GDP in Europe, compared to more than 0.6 percent in the United States. Even where the market for informal secondary capital functions adequately, restrictive taxation laws frequently provide a disincentive for angel investment in new ventures or businesses in crisis.

Interviews with entrepreneurs produced a number of possible solutions to this problem as well as other funding difficulties. These include:

- Provide tax breaks to angels investing in restarters
- Formalize and increase the visibility of national and regional angel networks
- Establish mixed public-private funding schemes

SOLUTION: TARGETED RESTARTER FINANCING PROGRAMS

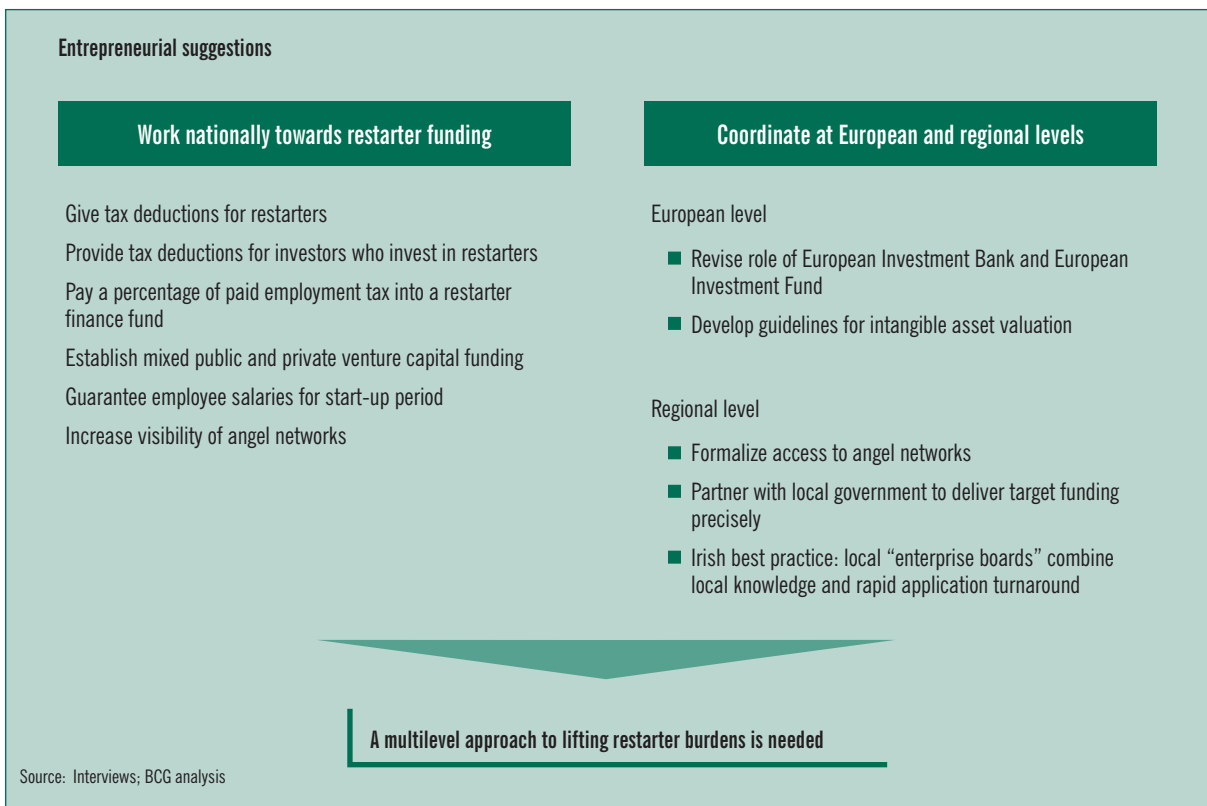


Fig. 10

5.3 Breaking down social barriers

We have established that entrepreneurial renewal is a driver of economic growth: the greater the percentage of business exits and entries in relation to the stock of business per capita, the healthier an economy is likely to be. Failure is clearly a necessary precondition for growth. Yet, particularly in Europe, failure in business is still seen as a mark of stigma. In sharp contrast to the United States, there is no general public perception of failure as a necessary precondition for success; nor, indeed, is it widely understood that failure is a necessary—and sometimes unavoidable—cost of rational risk taking.

Prior research has shown that the “stigma” attached to business failure is contingent upon sociocultural factors which vary from country to country.

STIGMA OF FAILURE—A QUESTION OF CULTURE?

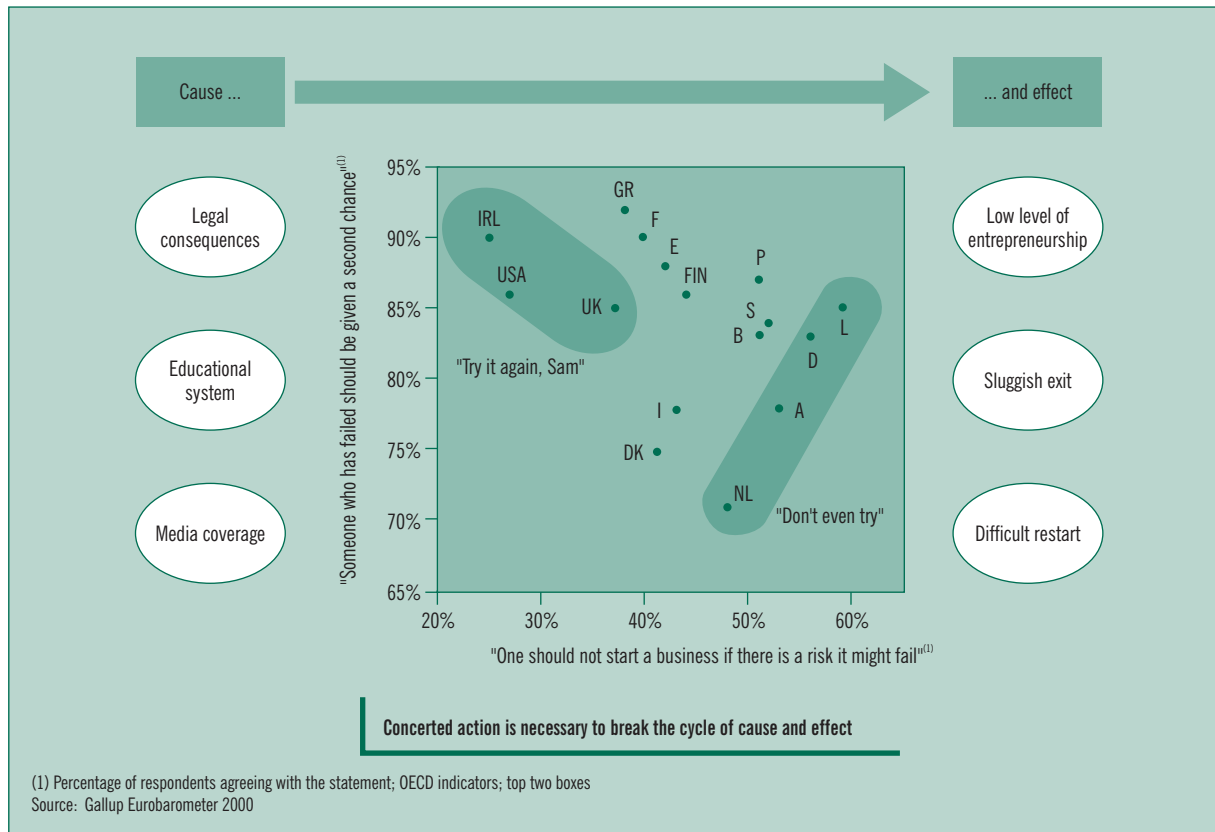


Fig. 11

The stigma connected to failure already prejudices the likelihood of market entry. The consequences of failure are perceived to be harsher in lands where a greater stigma is attached to failure, and thus fewer potential entrepreneurs enter the market in these countries. The stigma of failure influences entrepreneurs throughout the business life cycle: the shame of admitting a capital business mistake strongly discourages entrepreneurs from admitting errors in time, cutting their losses, exiting, and starting again. Our research results show that English-speaking countries are not only less risk averse regarding “first tries,” but are also more inclined to give restarters a second chance. An entrepreneurially-oriented education system, a restarter-friendly regulatory system, and a generally more favorable press support this attitude.

Our research also indicates that stigma is contingent upon the business context of failure. Industry maturity and enterprise age are the two significant predictors of stigma: failing in a mature industry as an incumbent is more shameful than failing in a nascent industry with a start-up business. In nascent industries the degree of uncertainty is high and successful business strategies have not yet been established. Entrepreneurs of young start-ups have far fewer fixed assets, less-established structures and tend to employ a more flexible workforce. so it is easier, both personally and for their company, for them to redirect their entrepreneurial efforts if their enterprises fail.

... AND A QUESTION OF BUSINESS SITUATION?

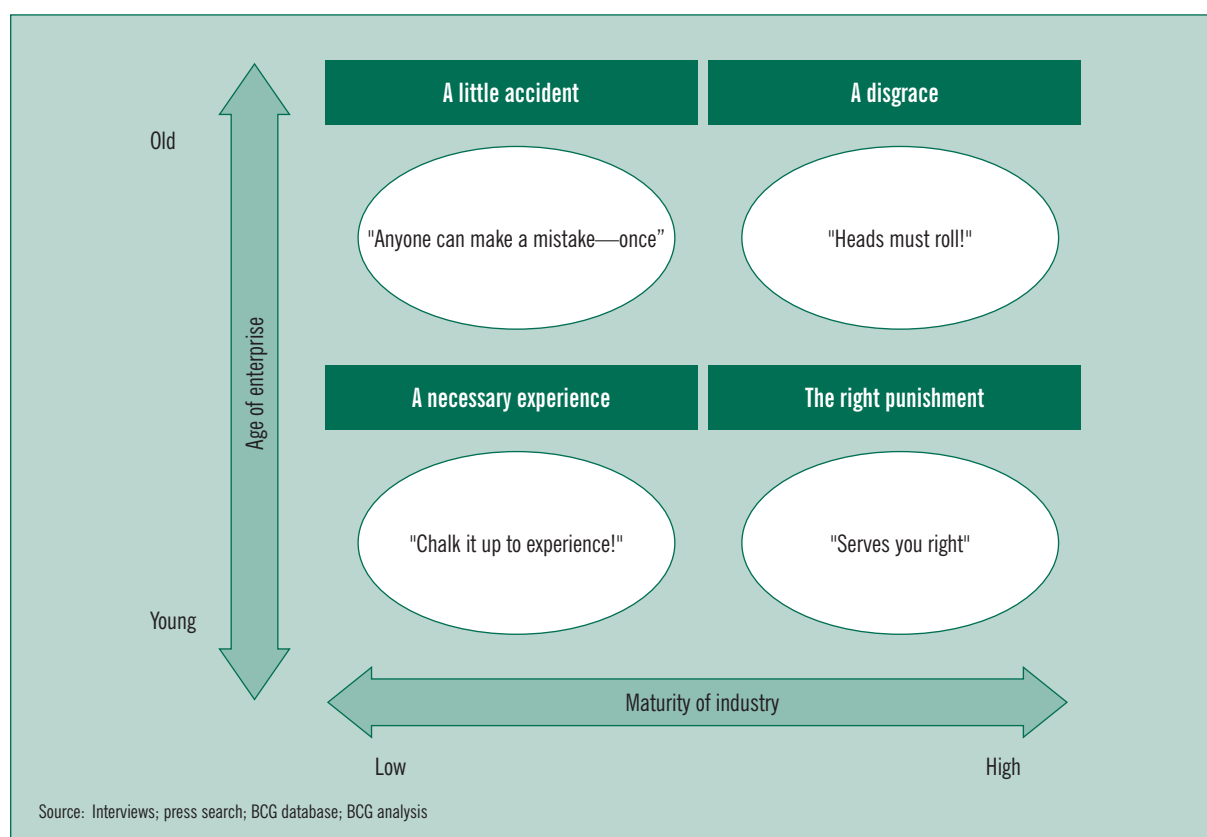


Fig. 12

Our interviews reveal that business failures are not only professional challenges for entrepreneurs, but, even more so, personal challenges as well. These interviews also provided an abundance of positive stories of entrepreneurs who experienced success after business failure. The first step to removing the stigma that adheres to business failure is to make successful restarters' economic achievement (measured in terms of revenues and employment) far more visible to society. Giving successful "encore" entrepreneurs public visibility would show that, while running your own business includes the risk of failure, failure is not the end of an entrepreneurial career. Providing professional training for and establishing an effective network of restarters at the European level can help build a restarter-friendly environment. By establishing "junior enterprises," pupils and students can both learn and practice entrepreneurship as part of their education—and learn from a young age that failure sometimes is a necessary and vital part of the entrepreneurial experience.



6

LEARNING FROM SUCCESSFUL RESTARTERS

Past research work has established the significant role business plays in society. Insights from research on the economic value of entrepreneurial start-ups have resulted in numerous national initiatives that aim to improve regulatory and financial conditions to encourage new business formation. Our interviews with entrepreneurs and financial and legislative experts indicate, though, that little or no support is offered to those who found new businesses after business failures.

In our study of entrepreneurial renewal, we focus particularly on the roles played by those entrepreneurs who were personally responsible both for the exit of one business—generally in the context of business failure, and for the entry of another. We term these people, the most dynamic members of a country’s entrepreneurial population, entrepreneurial restarters.

FIVE LESSONS FOR A SUCCESSFUL RESTART

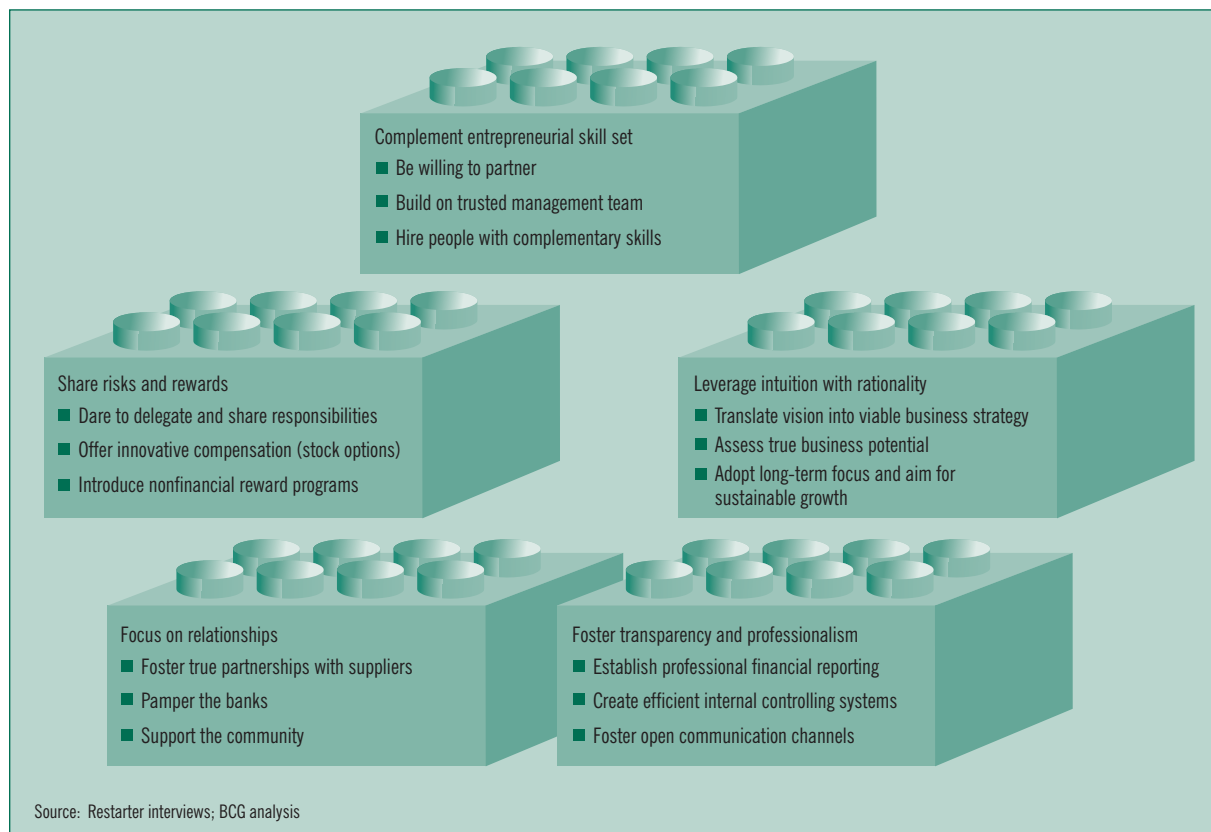


Fig. 13

We find that to succeed on the second go, restarters need the ability to learn from their mistakes: they must be able to assess the past objectively, identifying the reasons for business failure and adapting their behavior accordingly for a restart venture.

Five key characteristics emerged during interviews with successful restarting entrepreneurs:

1. Entrepreneurial restart is rarely a solo effort: successful restarters analyze their skill sets and real assess gaps failure, complementing those gaps with an appropriately skilled team.
2. Entrepreneurial intuition needs to be balanced by business rationality. A strong entrepreneurial vision is common to all entrepreneurs, but successful restarters are those who have acquired the ability to translate that vision into a viable business plan, focusing on long-term, sustainable growth and employing a proven management system to implement realistic goals.
3. Successful restarters attach prime importance to transparent information systems, both in order to sustain a competitive advantage and to ensure that warning signs are detected at the earliest possible moment. Restarters work continuously to implement and maintain state-of-the-art financial reporting mechanisms and efficient internal controlling systems. They also strive to ensure a culture of open communication where information flows constantly throughout the firm across all hierarchical levels.
6. Restarters understand the gains that come from sharing risks and rewards with employees. In successful restarter firms, remuneration structures reflect a close alignment of owner, employer, and employee interests. Compensation structures are innovative and do not rely exclusively on financial compensation.
7. Successful restarters devote significantly more of their time than entrepreneurs who have never failed to developing and nurturing key relationships, both with direct partners (customers, banks, and suppliers) and with the wider community within which they operate.

7

FROM WOE TO GO—REWRITING THE ENTREPRENEURIAL AGENDA

Europe has exerted considerable effort to transform itself into having a dynamic, knowledge-based economy. But the entrepreneurial climate in Europe is still hostile to those who can bring the greatest rewards: entrepreneurial restarters who transcend failure to grow more rapidly and create jobs more swiftly than their peers who have never failed. Currently, these phoenixes face considerable regulatory, financial, and social barriers. Tearing down these barriers will require a different “entrepreneurial agenda” followed by concerted action at the European, national, and regional levels.

The prize is an economic dividend waiting to be reaped: the integration of Europe’s most dynamic entrepreneurs into a vigorous, entrepreneurial society. We recommend the following five steps be taken to achieve that end:

1. Adopt a prioritized best-practice regulatory improvement program
 - Identify and adopt programs to cut the red tape associated with business start-ups.
 - Accept that failure—and bankruptcy—are sometimes unavoidable costs of rational risk taking and reduce bankruptcy times for honest entrepreneurs in order to reduce turnaround times.
 - Assess whether current employment law discriminates against start-ups in nascent and fluctuating high-growth sectors by making temporary employment difficult and imposing high auxiliary costs (social insurance) on employers.
 - Assess whether taxation and social insurance rules discriminate against employees in these sectors by penalizing taking second and part-time jobs.

2. Create a best restarter network
 - Work at the regional level to provide 360-degree turnaround, touch-and-go support during crises with mediated roundtables between entrepreneurs, creditors, financial authorities, angels, and restructuring advisers.
 - Put potential restarters in touch with one another via restarter networks.
 - Consider adopting regional “resource centers”—based on, for example, the Swedish model, to provide one-stop shopping for nascent entrepreneurs and restarters.
3. Launch a “best restarter” campaign
 - Make reducing the stigma of failure a priority.
 - Start a “best restarter” campaign to give visibility to “phoenix entrepreneurs” who have gone from failure to success.
 - Give phoenixes a forum to tell their stories.
 - Raise public awareness of the positive economic effects of failure.
 - Introduce awareness of failure educationally via, for example, “young enterprise” programs.
4. Establish a “best restarter” venture capital fund
 - Work at the European level with private-sector representatives to develop valuation standards for virtual assets.
 - Work at the national level with representatives of the secondary capital market to increase the transparency of and access to venture capital and angel funding.
 - Establish public- and private-sector “Phoenix Funds” to level the playing field for restarter funding; consider funneling a percentage of the employment tax paid by failed entrepreneurs into that fund.
5. Endow a “best restarter” award
 - Work at the regional and national level to identify best restarter role models.
 - Endow a “Best European Restarter” award as a sign of faith in the importance of identifying and nurturing restarter potential.

8

SAMPLE AND METHODOLOGY

8.1 Europe's 500—a sample of highly dynamic growth companies

Europe's 500 (E500) is a group of entrepreneurial companies in Europe that consistently create both employment and turnover at an above-average rate. Their performance has been remarkable: from 1995 to 2000 they created just over 252,000 jobs and increased their turnover by 36.5 billion. It is also remarkable that approximately one-third of the companies (153) have managed to sustain this rapid growth over an even longer period (1993 to 2000) (they were already included in a prior E500 listing). These companies can be found throughout Europe—from Iceland to Greece, and come from all industries—from traditional “old” to the much acclaimed “new” economy sectors (Europe's 500 Honorary Listing 2001).

Prior research from The Boston Consulting Group has shown that the E500 listed on a stock exchange not only grew in terms of employment and turnover but also recorded annual total returns to shareholders of over 100 percent. As a group, the E500 has consistently outperformed the NASDAQ and the MSCI Europe Growth index (“What Goliath Can Learn from David—Hidden role models in value creation and entrepreneurship,” 2000).

8.2 The E500 selection process

GrowthPlus, an association whose mission is to “promote entrepreneurship throughout Europe and to advise policy makers on ways to improve the environment for growth companies,” publishes the annual E500 listing—the recognition of Europe's 500 fastest growing entrepreneurial firms. The association is organized into 18 country chapters, the most active of which are in Germany, the Netherlands, Austria, Spain, Italy, and France. GrowthPlus also organizes research projects and fosters local networking.

In order to be included in the E500, companies must meet the following conditions:

- Entrepreneurs must own at least 15 percent of their equity.
- No industrial shareholder may own more than 50 percent.
- The company's turnover and employment must have grown by at least 50 percent over the past five years.
- Growth in the company's employment and turnover must have been largely organic⁽¹⁾—that is, not achieved by merger or acquisition.
- The company must have had fewer than 5,000 employees in its first reporting year and more than 50 in the last year of reference.
- The company must be at least three years old.
- The company must be profitable.

(1) In some cases exceptions have been made and companies that have grown through mergers or acquisitions during a short period of time have been included.

The selection process for each year's E500 begins with the compilation of a database from existing national lists, databases, individual nominations, the previous E500 listings, and from searches on databases.

The first lists include approximately 7,000 companies from across Europe. Various country experts (consultants, media, and leading business executives), using both negative evaluation (exclusion of companies) and positive confirmation (nomination of specific companies), review this list. This process reduces the preliminary list to about 4,000 companies.

These 4,000 companies are then whittled down to 700 on the basis of a questionnaire sent to the entrepreneurs themselves to verify data.

These 700 are further reduced to the final 500 after another expert review and after consideration of their BIRCH index. To be included in the list, a company’s BIRCH index $([e1 - e2] \times e1 \div e2)$; with e1 the level of employment in the latest reference year and e2 the level of employment in the first reference year) must be higher than 100.

The sample for the study is the 1999 E500 Honorary Listing.

BREAKDOWN OF THE SAMPLE BY COUNTRY



Fig. 14

8.3 Methodology

As one of the strategic partners of GrowthPlus, The Boston Consulting Group began an extensive research program to conduct in-depth studies of these dynamic entrepreneurial companies. The objectives of this report are:

- ➔ To analyze the economic role of entrepreneurial restarters and the factors needed to create a regulatory, financial, and social environment in which they can flourish
- ➔ To evaluate the patterns common to successful restarters
- ➔ To present role models of how entrepreneurs from the E500 companies have managed to start new, successful companies after experiencing business failures
- ➔ To provide benchmarks and best-practice examples for all involved parties—public institutions and organizations, legal advisors, banks, and entrepreneurs—as well as the general public

To compile the necessary data BCG conducted desk research, collecting data from public databases, Datastream, Bloomberg, company brochures, annual reports, and press releases. In addition, we conducted several interviews with entrepreneurs.

We employ several measures in the study. The key measure is “entrepreneurial renewal,” a measure built on several others used in theory and practice.

DIFFERENT APPROACHES TO MEASURING ENTREPRENEURIAL ACTIVITY

Approach	Explanation	Assessment
Turbulence ⁽¹⁾	Entries + exits in percent of business stock	Does not relate activity to overall level of entrepreneurship in a country
Nascent start-up rate ⁽²⁾	No. of 18- to 64- year olds attempting to start a business in percent of total population	Measures a country's entrepreneurial potential Does not measure success rate
New firm rate ⁽²⁾	No. of 18- to 64- year olds who started business within last 3½ years in percent of total population	Does not relate entries to exits Does not measure industry growth
Total entrepreneurial activity ⁽²⁾	Nascent start-up rate + new firm rate	Indicates what proportion of potential entrepreneurs are successful
Entrepreneurial renewal	(Entries + exits in percent of business stock) × business stock per capita	Comparison of entrepreneurial activity possible across countries Puts turbulence in context of level of entrepreneurship in a given population

(1) Entrepreneurship in the Netherlands, EIM 2000
(2) Measures used by GEM study 2000

Fig. 15

In addition, we developed an index to measure the debtor or creditor orientation of insolvency law in each country studied. Factors weighted towards a debtor orientation include:

- Choice to enter insolvency regardless of a firm's formal cash flow status
- Freedom to choose when to enter into insolvency
- Retention of control by managers during reorganization
- Rehabilitation of a bankruptcy in five years or less

Factors weighted towards a creditor orientation include:

- An absence of an automatic stay of claims once a firm has begun insolvency proceedings
- Priority given to secured claims
- Restrictions on managerial freedom to reorganize
- Replacement of management during reorganization



BCG Germany

The Boston Consulting Group
Dircksenstraße 41
10178 Berlin
Germany

Tel: +49 (0)30-28 87 10

The Boston Consulting Group
KölnTurm
Im Mediapark 8
50670 Cologne
Germany

Tel: +49 (0)221-55 00 50

The Boston Consulting Group
Ludwigstr. 21
80539 Munich
Germany

Tel: +49 (0)89-23 17 40

The Boston Consulting Group
An der Welle 3
60322 Frankfurt
Germany

Tel: +49 (0)69-91 50 20

BCG Austria

The Boston Consulting Group
Am Hof 8
1010 Vienna
Austria

Tel: +43 (0)1-537 56 80

The Boston Consulting Group
Stadttor 1
40219 Düsseldorf
Germany

Tel: +49 (0)211-30 11 30

The Boston Consulting Group
Chilehaus A
Fischertwiete 2
20095 Hamburg
Germany

Tel: +49 (0)40-30 99 60

The Boston Consulting Group
Kronprinzstraße 28
70173 Stuttgart
Germany

Tel: +49 (0)711-20 20 70

Contacts

For further information on this study,
please contact:

Holger Odenstein: odenstein.holger@bcg.com
Susanne Riedler: riedler.susanne@bcg.com

Amsterdam	Helsinki	New York
Athens	Hong Kong	Oslo
Atlanta	Istanbul	Paris
Auckland	Jakarta	Rome
Bangkok	Köln	San Francisco
Barcelona	Kuala Lumpur	São Paulo
Beijing	Lisbon	Seoul
Berlin	London	Shanghai
Boston	Los Angeles	Singapore
Brussels	Madrid	Stockholm
Budapest	Melbourne	Stuttgart
Buenos Aires	Mexico City	Sydney
Chicago	Milan	Tokyo
Copenhagen	Monterrey	Toronto
Dallas	Moscow	Warsaw
Düsseldorf	München	Washington
Frankfurt	Mumbai	Wien
Hamburg	New Delhi	Zürich