H.R. 2373, THE START-UP SUCCESS ACCOUNTS ACT OF 1999

HEARING

BEFORE THE

SUBCOMMITTEE ON EMPOWERMENT

OF THE

COMMITTEE ON SMALL BUSINESS
HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

WASHINGTON, DC, NOVEMBER 2, 1999

Serial No. 106–39

Printed for the use of the Committee on Small Business

U.S. GOVERNMENT PRINTING OFFICE
61–270 WASHINGTON : 1999

COMMITTEE ON SMALL BUSINESS

JAMES M. TALENT, Missouri, *Chairman*

LARRY COMBEST, Texas
JOEL HEFLEY, Colorado
DONALD A. MANZULLO, Illinois
ROSCOE G. BARTLETT, Maryland
FRANK A. LOBIONDO, New Jersey
SUE W. KELLY, New York
STEVEN J. CHABOT, Ohio
PHIL ENGLISH, Pennsylvania
DAVID M. MCINTOSH, Indiana
RICK HILL, Montana
JOSEPH R. PITTS, Pennsylvania
JOHN E. SWEENEY, New York
PATRICK J. TOOMEY, Pennsylvania
JIM DEMINT, South Carolina
EDWARD PEASE, Indiana
JOHN THUNE, South Dakota
MARY BONO, California

NYDIA M. VELAZQUEZ, New York
JUANITA MILLENDER-MCDONALD, California
DANNY K. DAVIS, Illinois
CAROLYN MCCARTHY, New York
BILL PASCRELL, New Jersey
RUBEN HINOJOSA, Texas
DONNA M. CHRISTIAN-CHRISTENSEN, Virgin Islands
ROBERT A. BRADY, Pennsylvania
TOM UDALL, New Mexico
DENNIS MOORE, Kansas
STEPHANIE TUBBS JONES, Ohio
CHARLES A. GONZALEZ, Texas
DAVID D. PHELPS, Illinois
GRACE F. NAPOLITANO, California
BRIAN BAIRD, Washington
MARK UDALL, Colorado
SHELLEY BERKLEY, Nevada

HARRY KATRICHIS, *Chief Counsel*
MICHAEL DAY, *Minority Staff Director*

SUBCOMMITTEE ON EMPOWERMENT

JOSEPH R. PITTS, Pennsylvania, *Chairman*

PHIL ENGLISH, Pennsylvania
JIM DEMINT, South Carolina
FRANK A. LOBIONDO, New Jersey
EDWARD PEASE, Indiana

JUANITA MILLENDER-MCDONALD, California
DENNIS MOORE, Kansas
STEPHANIE TUBBS JONES, Ohio
TOM UDALL, New Mexico

DWAYNE ANDREWS, *Professional Staff Member*
STEPHANIE O'DONNELL, *Legislative Assistant*

CONTENTS

	Page
Hearing held on November 2, 1999	1

WITNESSES

Kerrigan, Karen, Chairman, Small Business Survival Committee	4
Pages, Erik R., Policy Director, National Commission on Entrepreneurship	6
Horton, Pepper, CPA, Tax Technology, LLC	8

APPENDIX

Opening statements:	
Pitts, Hon. Joseph R	23
DeMint Hon. Jim	25
Baird, Hon. Brian	26
Prepared statements:	
Kerrigan, Karen	28
Pages, Erik R	34
Horton, Pepper	42
Additional Information:	
Letter to Congressman Baird from Frank Nichols, President, Silicon Forest Electronics, Inc	44
Global Entrepreneurship Monitor, 1999 Executive Report	46
Global Entrepreneurship Monitor, National Entrepreneurship Assessment; United States of America, 1999 Executive Report	94

H.R. 2373, THE START-UP SUCCESS ACCOUNTS ACT OF 1999

TUESDAY, NOVEMBER 2, 1999

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON EMPOWERMENT,
COMMITTEE ON SMALL BUSINESS,
Washington, DC.

The Subcommittee met, pursuant to call, at 10 a.m., in room 2360, Rayburn House Office Building, Hon. Joseph R. Pitts (Chairman of the Subcommittee) presiding.

Chairman PITTS. We will call the hearing to order.

I am Congressman Joe Pitts from Pennsylvania. Good morning and welcome. Thank you for joining the Empowerment Subcommittee today for a hearing on the Start-Up Success Accounts Act of 1999, or SUSA. This bill was authored by the Vice Chairman of this Subcommittee, my friend from South Carolina, Mr. Jim DeMint, and by another member of the Small Business Committee who joins us today, Mr. Brian Baird from Washington.

I am going to yield most of my time to Mr. DeMint, as it is his bill, and he can speak in more detail about it, but first I would like to thank Mr. DeMint and Mr. Baird for their work on this legislation and their leadership in the area of tax relief for small businesses.

One goal of the Empowerment Subcommittee is to promote legislative initiatives that enable entrepreneurs to realize their dream of becoming small business owners and to sustain their small businesses once operational. The Start-Up Success Accounts Act, of which I am a cosponsor, is an example of this type of legislation, one which seeks to lessen the burden felt as a result of a complicated Tax Code that is not small-business-friendly.

Excessive taxation is especially detrimental to the success of new small businesses, which typically encounter numerous difficulties as they struggle to grow in the first few years. Quite often business owners are counseled to reinvest their profit into the business by purchasing equipment or giving bonuses, thereby avoiding taxation on the business's profits. But what if there was a way for small business owners to both avoid immediate taxation and save more of the money that they earned? That is exactly what H.R. 2373 proposes.

This bill would allow a new small business the opportunity to use a tax-deferred savings account for a period of time during the beginning stages of business development. By utilizing this SUSA as a money management tool, start-up, small business owners would be able to retain capital by putting up to 20 percent of their annual

taxable income, up to $200,000 per year, into a SUSA. This supply of capital may help withstand periods of slow business or increased competition by allowing them to save when business is profitable.

I want to welcome our witness panel, Ms. Karen Kerrigan, Chairwoman of the Small Business Survival Committee; Mr. Erik Pages, Policy Director for the National Commission on Entrepreneurship; and Mr. Pepper Horton, a CPA from Greenville, South Carolina, and entrepreneur himself. Thank you all for being here, and I look forward to your testimony.

[Mr. Pitts's statement may be found in the appendix.]

Chairman PITTS. Mr. DeMint.

Mr. DEMINT. Thank you, Mr. Chairman. I thank you for holding this hearing today, and particularly for your passion to empower the disadvantaged through our efforts for small businesses. Earlier this year Representative Baird and I introduced H.R. 2373, what we call the Start-Up Success Accounts Act of 1999. Our Chairman has referred to that as SUSA accounts.

The purpose of this legislation is to give small businesses an additional tool to manage finances and particularly to retain capital. According to the Census Bureau, over 99.9 percent of business closures are small firms. One of the primary reasons for business failures is a lack of capital. This problem is further aggravated by a tax system that discourages capital retention. The ultimate result is less growth and less staying power. Operating with no capital, even a small downturn in sales, can put a new company out of business.

H.R. 2373 would allow new business start-ups to place up to 20 percent of profits but not more than $200,000 into tax-deferred SUSA savings accounts for each of the first 5 years of businesses. This would allow new businesses that are profitable in the first few years to set aside some profits to prepare for a downturn in later years. Money could be set aside in an account for up to 5 years after the deposit.

The idea for this bill came from my own experience as a small businessman in starting my own company. It is similar to a bill offered by our colleague Kenny Hulshof, which would help farmers and ranchers manage capital with farm accounts. In starting my own business, I learned how hard it is to manage finances as you try to stay afloat, especially in those first few years of business. It isn't easy, especially with the current Tax Code, and I believe anyone who takes on the challenge of starting a business deserves not only our respect, but our support.

I appreciate the work of this Committee in exploring ways to remove obstacles that often stand in the way of the success of small businesses. Small businesses create virtually all of the net new jobs in this country today, with women and minority-owned businesses making up one of the fastest-growing segments of small businesses. It is particularly important for this Committee to take on this challenge. That is why I am pleased that the Empowerment Subcommittee is having this hearing today to try to empower those who try to revitalize our Nation.

I would like to add my thanks to all of you who are testifying today: Karen Kerrigan with the Small Business Survival Committee; Erik Pages, thank you for being here; and particularly Mr.

Horton from my district, I appreciate you coming up. You not only have a lot of experiences as an accountant, but you started your own business and have a little bit of feel what it is like. I particularly appreciate all of you being here, and I yield back the balance of my time.

[Mr. DeMint's statement may be found in the appendix.]

Chairman PITTS. Mr. Baird, would you like to make an opening statement?

Mr. BAIRD. Thank you, Mr. Chairman. I want to thank you for holding this hearing, and I thank my good friend from South Carolina, and I thank the witnesses for being here.

We have worked together, the gentleman from South Carolina and I, because of our concern for small businesses. I am the son of small business owners. My folks—my mom owned a bridal shop, and then my father and mother together bought an ice cream store, and I saw what they struggled with through the lean and the good years.

One of the things that is clear from that experience personally and from meeting with business owners in my own district is the important challenge of finding capital, and the Start-Up Success Account Act is designed to address precisely that.

I had a business owner come to me and say it is sometimes easier to find the start-up capital to just get going than it is once you are in place, and then you really need to set something aside to fund further expansion, and that is precisely what this bill is designed to do. The challenge is how can we make capital more available to our businesses as they try to expand; and importantly, how can we put the control of that capital in the hands of the business owners.

As we prepared for this hearing, I talked to some folks who I had the very great privilege of being at the grand opening of their electronics manufacturing plant just a few months ago. A gentleman named Frank Nichols has invested every single penny he has got. He has mortgaged his home. He has gotten help from his church members, and they have a very, very exciting business on the line that could expand. They hope to employ as many as 200 people in our district.

The challenge, however, is capital. And with the consent of the Chair, I would like to read a portion of a letter that he submitted to me as he knew I was preparing for this, and it tells the story why the start-up success account is so important. Here is what Mr. Nichols writes: "we have tried the traditional source of funds. The banks are only interested if you have collateral of a value greater than the amount you want to borrow, preferably in CDs. The local economic development sources of funds are not available to start-ups or are limited to the rural or economically depressed areas. We have tapped our own sources to the max. Everything we own is now mortgaged or used to secure the leases or part of our original capital investments, and our credit card balances are climbing."

That is not an uncommon statement, and the situation here is if he is successful in his first year and realizes profits, we should put him in a situation where he can set those profits aside for savings for future investments rather than feeling that he has to

spend them, perhaps, in the process, incurring further debt, thereby further jeopardizing his capital security.

Precisely that mission is what the Start-Up Success Accounts Act is designed to accomplish, and I thank the Chairman and the witnesses today, and I am interested in hearing your thoughts on how we can improve the bill.

Chairman PITTS. Thank you.

[Mr. Baird's statement may be found in the appendix.]

Chairman PITTS. Mr. Moore, any opening statement?

Mr. MOORE. No opening statement, Mr. Chairman.

Chairman PITTS. Then I call on Ms. Kerrigan at this time.

STATEMENT OF KAREN KERRIGAN, CHAIRMAN, SMALL BUSINESS SURVIVAL COMMITTEE, WASHINGTON, DC

Ms. KERRIGAN. Thank you. First of all, let me thank you for inviting our group, the Small Business Survival Committee, for being a part of this important hearing. On behalf of SBSC and its more than 50,000 members, I am pleased to have this opportunity to testify in support of the Start-Up Success Accounts Act of 1999. I am Karen Kerrigan, Chairman of SBSC, a nonpartisan, nonprofit small business advocacy and watchdog organization headquartered in the Nation's capital.

Let me also thank you, Mr. Chairman, for holding this important hearing, and, of course, both Congressman DeMint and Congressman Baird for their leadership in introducing H.R. 2373. Many times our organization has had—our staff, members, our small business members, members of our board of directors have had the honor to testify before Congress regarding the hurdles faced by the small business entrepreneurial sector of our economy and the ways that our elected officials can help create an economic and policy environment favorable for their growth, success and, of course, their survival.

SBSC is pleased that the Congress continues to place the needs of small business at the top of its agenda, and we are encouraged by bipartisan initiatives such as the SUSA Act of 1999 that will make a meaningful difference for many young enterprises across the country.

Access to capital remains a serious obstacle for many small firms as it was in 1995 when the delegates to the White House Conference on Small Business ranked the issue as one of its top priorities. Out of the 60 recommendations that were presented to the President and to Congress, 15 of those related to capital needs. Many of the efforts undertaken by the Congress since that conference to lower the tax and regulatory burden on small businesses, to help increase risk-taking and entrepreneurship, as well as increase capital access, for example, cutting the capital gains tax, have been a plus for members as well as small businesses in general.

Passage of the SUSA Act of 1999 sponsored by Representatives DeMint and Baird is another way, a creative and common-sense solution that would assist many small businesses through the tumultuous and challenging early years of their development. Because the Tax Code discourages capital retention, many small businesses are often faced with cash shortfalls at critical phases. These peri-

ods include times when a business needs extra capital for expansion and growth or cycles when business activity may slow down and there is little flexibility in managing fixed expenses, or simply periods of adjustment when the business needs an infusion of cash to react to changes in the marketplace.

The SUSA option whereby new small businesses would be allowed to place up to 20 percent of taxable income into tax-deferred savings accounts for each of the first 5 years of operation opens up new financial planning as well as financing opportunities for small firms most in need of these tools.

This Committee has studied the difficulty that many small businesses face in securing adequate capital to finance their growth. As most Committee members know, many banks require a documented track record of success, while venture capital and angel relationships are extremely competitive. These networks are often difficult to penetrate. Unfortunately, the tremendous success of venture funds in raising significant amounts of capital have made small investments less attractive. This means that small businesses need more tools to be self-reliant for their capital needs.

The Center for Venture Research of the University of New Hampshire estimated that about 300,000 growing companies and about 50,000 start-ups need equity capital each year. That was estimated in an analysis that the university conducted for the Small Business Administration. CVR projected that total funding needs for these companies amounted to $60 billion.

The SUSA solution would help small firms get out of the trap of passing through excess capital to avoid double taxation, subsequently followed by a frenzied search for capital to grow the business or to keep it afloat. Let me add that the owner can spend an inordinate amount of time and resources seeking such capital during times of need. The SUSA alternative in this regard promotes self-sufficiency and efficiency. In addition, the funds in these accounts will probably give the small business owner more leverage in securing competitive loans.

As more and more individuals determine that small business ownership is a goal they would like to pursue, particularly women as well as minority Americans, it is incumbent upon our elected officials to identify areas where public policy, particularly the Federal tax system, may be unwillingly assisting business closures. There are steps that can be taken to save some of the 99.9 percent of small firms that close their doors, and it is within the means of Congress to help salvage some of these businesses. This is especially true in many of our urban areas where small business success and nurturing of an entrepreneurial climate may be the only hope for the revitalization of inner cities, and the same can be said for small towns and small to mid-sized cities where factories and businesses have either left the country or moved to more hospitable business climates.

There is a need for the SUSA Act of 1999. Since the inception of SBSC just 5 years ago, hundreds of small businesses have contacted our offices in search of capital for their promising businesses. It is little solace to such entrepreneurs when we explain to them that we only serve as a watchdog group advocating legislative measures to increase access to capital for businesses that are in the

start-up phase. However, we have learned a lot from these entrepreneurs, and we feel strongly that the SUSA Act of 1999 is one way to equip such businesses with an option that allows each one of them to chart their financial destiny and their survival.

Again, I congratulate Representatives DeMint and Baird for introducing and pursuing with great vigor H.R. 2373. We support this initiative and look forward to working with Members of the U.S. House of Representatives to ensure its passage. Thank you, and I look forward to answering questions from Committee members.

Chairman PITTS. Thank you.

[Ms. Kerrigan's statement may be found in the appendix]

Chairman PITTS. Before we ask any questions, we will receive testimony from all three of the witnesses. I now turn to Mr. Erik Pages, policy director of the National Commission on Entrepreneurship.

STATEMENT OF ERIK R. PAGES, POLICY DIRECTOR, NATIONAL COMMISSION ON ENTREPRENEURSHIP, WASHINGTON, DC

Mr. PAGES. Thank you, Mr. Chairman, and members of the Subcommittee for inviting me. My name is Erik Pages, and I am here representing the National Commission on Entrepreneurship. We are a new organization with a 3-year charter to help government policymakers better understand the needs and interests of entrepreneurs, and to inform public policies that support these needs. We were established by the Kauffman Center for Entrepreneurial Leadership, which is part of the Kansas City-based Ewing Marion Kauffman Foundation.

On behalf of all of our Commissioners, I want to thank the Subcommittee for holding this important hearing. We also commend Representatives DeMint and Baird for their leadership in sponsoring H.R. 2373. It is an important proposal that could play a critical role in supporting entrepreneurs across the Nation.

H.R. 2373 is designed to provide support to one of the fastest growing sectors in the business world. As the Subcommittee members certainly know, we are enjoying a true boom in entrepreneurship in the United States. Let me give you some recent data to support this point. I would like to submit two reports for the record which detail these points.

In cooperation with the Kauffman Foundation, we recently released a study of start-up activity in the United States and nine other industrialized countries. This study, The Global Entrepreneurship Monitor, found that America is far and away the most entrepreneurial country on Earth. This was not a surprise to us. What did surprise us was the pervasiveness of entrepreneurship across the United States. Each year Americans start anywhere from 600,000 to 800,000 new companies that hire employees. That adds up to roughly 14–16 start-ups for every 100 existing businesses. At the same time an additional 2 million new businesses are started each year as self-employment ventures. So overall, roughly 8 percent of the American adult population, that is nearly 16 million people, are in some stage of trying to start a new business. This is a very robust level of new business activity.

But as you know, the vast majority of new start-ups do not succeed. This is no surprise as starting a new company is a high-risk venture. We are continuing to study the factors that lead to business success and failure, but I can highlight some preliminary factors that appear to play a role, and H.R. 2373 addresses what is probably the most critical external factor in a new firm's success, acquiring and retaining capital.

Our Commission has found that capital is readily available for most businesses in the country today, but unfortunately, this good news does not apply to all entrepreneurs. Our research has uncovered a capital gap that often exists for small start-up companies.

When a company is first started and has limited capital needs, say under $50,000, funds can generally be obtained from family and friends or from less orthodox sources like credit cards. Thus, most people who start a self-employment venture can generally find funds for that purpose.

However, when a company needs funding in the range of $50,000 to $1 million or $2 million, sources of equity capital often dry up. Most venture capital funds are seeking larger deals, and banks continue to shy away from high-risk start-ups. Angel investor networks, which are growing in importance, are available, but not all start-ups have been able to access these sources of funds. Like venture capital, angel capital funds tend to be highly concentrated in specific geographical regions.

Let me talk about the Start-Up Success Accounts Act of 1999. As our analysis indicates, H.R. 2373 is targeted on the right problem. The first 5 years of a company's life are its most tenuous. Even if a company is profitable, it must reinvest its profits into fixed assets, recruiting and training new workers, expanding distribution channels and other tasks. Thus, even successful entrepreneurs face major challenges regarding cash flow during the first 5 years of existence. If firms survive through this transition period, they tend to succeed. Indeed, firms that survive after 3 years show significantly lower failure rates than comparable businesses.

Moreover, many of these firms become what are commonly referred to in the economic development profession as gazelle firms. These are companies with annual sales growth increases that exceed 20 percent or more for 4 years. The typical gazelle firm does not simply take off after finding a hot niche. The typical Internet story is not what happens for most companies. It is far more common to see a gradual development phase over 3 to 5 years, say, followed by robust but not explosive growth.

H.R. 2373 seeks to support these new firms by creating a tax-deferred account known as a Start-Up Success Account wherein small businesses can place annual deductions of up to 20 percent of income or $200,000 during the first 5 years. These funds would be drawn from operating income, and withdrawals would be treated as taxable income in the year in which they were drawn. These accounts could provide an additional safety net for businesses in their critical start-up phases. During a firm's first 5 years, it will inevitably hit some type of downturn that affects capital flow.

Under current rules, entrepreneurs often use credit cards or take on new loans to weather the tough times. These new accounts could provide a direct source of alternative capital, or they could

be used as collateral to secure more competitive loan rates. By allowing new firms to avoid taking on new debt, we can help set the stage for more rapid future expansion and job creation.

We believe that H.R. 2373 includes several provisions that are particularly important. First off, the limitations on the availability of the accounts in terms of the time period, 5 years, and the size of the company, under $5 million in gross receipts, makes sense. We believe that this program must be tightly focused on new entrepreneurs and start-up companies.

Secondly, the bill contains some restrictions on the use of the accounts, and we believe that the Subcommittee might consider additional language to ensure that the accounts are explicitly used for new business and are not diverted for other purposes.

Finally, we believe that the SUSA accounts would be particularly helpful to women and minority entrepreneurs. These business founders often start their firms with lower levels of initial investment, and thus face higher risks of failure in the event of a business downturn.

Some other steps in addition to its consideration of H.R. 2373, we urge the Subcommittee to consider other steps to support America's entrepreneurs. We recommend that you examine the issue of angel capital and steps that can be taken to create local angel investor networks around the Nation.

We also urge you to review current technology transfer programs and examine how we might make these programs more friendly to entrepreneurs.

Finally, we believe ultimately that the most effective programs to support entrepreneurs must start at the State and local level. We would be happy to work with the Subcommittee in examining these issues. We will soon be releasing an analysis of State best practices in supporting entrepreneurship, and we will forward these findings to the Committee when the report is released.

In conclusion, on behalf of the National Commission on Entrepreneurship, I commend the Subcommittee for holding this important hearing and for its leadership in supporting America's entrepreneurs. These visionaries are the engine of the new economy, and your support is critical to their continued prosperity and vitality. Thank you, and I look forward to your questions.

Chairman PITTS. Thank you for your testimony.

[Mr. Pages' statement may be found in the appendix]

Chairman PITTS. Mr. Horton.

STATEMENT OF PEPPER HORTON

Mr. HORTON. My name is Pepper Horton, and I am a CPA from Greenville, South Carolina. I would just say I am very nervous. I would like to thank the Committee for the opportunity to come up here and testify today on the SUSA Act of 1999.

I started in 1989 as a CPA with Ernst & Young where I worked for 10 years, and eventually left Ernst & Young to start my own practice so I could deal with smaller businesses that could not afford me when I was working with a larger firm.

I feel that experience has given me a pretty good understanding of how large businesses operate and how small businesses operate. As a small business itself, I understand the pressures in how com-

panies manage their cash flows. And having a lot of accounts receivable from large companies, I understand how they manage their cash flows as well as how they are stretching their payables. I find a great deal of satisfaction working with new businesses and feel that I can really make an impact with these businesses as they try to get off the ground.

In reading through my colleagues' presentations, I was suddenly concerned that my presentation was too technical, and that really comes from my background. Whenever I see a piece of legislation, I immediately read the code and try to answer the questions what does the bill say, sometimes just as importantly what doesn't it say, and try to figure out how I might use that bill to help my clients. So I apologize if I have gotten too technical.

After reading the act and rereading the act, I summarized my thoughts into the following points, the first being double taxation. This bill would clearly be a great benefit to regular or C corporations in managing their cash flow. A corporation's net income is taxed at the corporate level, and when these earnings are distributed to the shareholders, the earnings are taxed again as dividends. Double taxation creates an enormous incentive for business owners and their consultants to keep corporate taxable earnings low. As a result, business owners engage in tax-motivated spending at or near year end.

If there is one thing I have learned in my career, it is that tax-motivated spending is at best an inefficient use of resources, and is often tantamount to throwing away a dollar to save 40 cents. That is one of the things that I try to continually stress to my clients, that spending money to avoid taxes is usually, like I said, throwing away a dollar to save 40 cents.

One of the most commonly used mechanisms for lowering corporate profits is increasing compensation to employee shareholders. Of course, the Tax Code mandates that employee shareholder compensation is reasonable. However, "reasonable" is a subjective term and often produces a range of compensation amounts that could be considered reasonable. As a result, business owners often have a huge incentive to accept compensation amounts that are on the high end of what is considered reasonable instead of what the business actually needs. This bill would mitigate that motivation by allowing corporations to receive the same tax effect as "comping out" the corporation's profits while still keeping the cash inside the corporation for future use that may or may not be anticipated.

Another use for the bill would be funding expansion. As a business grows, it must increase its inventory, secure new office or plant space, purchase new equipment, and train new employees. While section 179 allows many businesses to expense their equipment purchases, all of the other expansion-related expenditures generally must be capitalized for tax purposes. This can leave a new business in the unfortunate situation of having a tax liability because all of the spending that they have done is not deductible, or least not 100 percent deductible. It is amortized over a number of years, sometimes up to 39 years. It can leave the business in the unfortunate situation of having a tax liability with little cash on hand. At the end of year 2, for example, a new business could place some of the cash on hand to fund year 3's expansion into a SUSA

account and immediately reduce the business's tax liability. Even if this cash is only temporarily placed in a SUSA account, it provides a new business with a valuable tax deferral. Funds which would have ordinarily been remitted to the Treasury will still be in the private sector creating jobs and funding economic expansion.

The third point is smoothing out earnings. As you are aware, our tax brackets are graduated so the individuals and corporations with higher taxable income pay tax at a higher marginal rate. One possible use of SUSA accounts would be in the smoothing out of a business's earnings to avoid income spikes from temporarily thrusting taxpayers into a higher tax bracket. While generally accepted accounting principles, or GAAP, aim to match revenues with expenditures in the proper period, the Tax Code tends to accelerate income recognition and defer deductions in order to increase revenue. This and a host of other business factors can lead to the bunching of income in a given tax year. This bill could provide taxpayers a tool to lessen the sting of abnormally high taxable income in a single year.

On the self-employment tax section, section (e)(3) of the bill provides that the amounts included in gross income under the section will not be included in determining earnings from self-employment. This creates a planning opportunity to lessen the impact of the self-employment tax depending on how the business is classified for tax purposes. Sole proprietorship, single member LLCs and most partnerships' net earnings are subject to self-employment tax. My experience has shown that self-employment tax can have a potentially devastating effect on new business owners if they are not properly advised. If my understanding of this bill is correct, this provision provides an exclusion of the amount deposited in a SUSA account from the self-employment tax. That is a tremendous benefit.

One of the things that I have noticed, and I have felt myself as a new business owner, is that the self-employment tax can kill you. Especially for people leaving the corporate world to start a business. They really don't understand how the self-employment tax works, and they usually end up getting the April surprise when they do their tax returns and find out that they have not paid enough to cover the self-employment tax.

The bill's most obvious benefits are to provide the business with an opportunity to defer income taxes for up to 10 years while earning a return on the funds. In doing so, however, the bill encourages businesses to retain earnings rather than engaging in tax-motivated spending. However, I am concerned that as the business grows and as its profits expand, that the income from the SUSA will be taxed at a higher marginal rate than would have been paid in the year the deposit was made.

What I mean by that is that if a business's earnings are moderate in years 1 through 5, and the business continues to grow, the cash coming out of the SUSA account may be taxed at a higher rate than the tax benefit that was received when it went into the SUSA account. Some tax consultants may be a little reluctant to recommend to clients that they potentially expose themselves to paying higher marginal tax rate.

In conclusion, I would like to express my sincere appreciation to the Congressmen for their efforts to assist small businesses. As a

consultant to many small businesses and as an owner of a small business, I am impressed with their apparent understanding that small businesses are the backbone of our economy and will be the number one source of new jobs as we move into the next century.

Obviously I would love to see a bill that eliminated the double taxation that encourages debt financing and tax-motivated decision-making or a bill that simply lowered the tax rate that new businesses face. However this bill is clearly an effort to assist small businesses in managing their tax liability and overall cash flow. The unavoidable fact is that our Tax Code contains very few provisions aimed at helping small businesses get off the ground, and this bill is clearly a step in the right direction, and I am therefore happy to support it.

Chairman PITTS. Thank you.

[Mr. Horton's statement may be found in the appendix.]

Chairman PITTS. We will go to questioning now from the Members.

Mr. Horton, I would like to start with you. You mentioned in your testimony that the U.S. Tax Code often works against small entities. What do you think is the most detrimental effect of our Tax Code on our Nation's small businesses?

Mr. HORTON. One of the worst is double taxation of corporations, and that is one reason why I try to get clients in early when they are trying to decide what type of entity to choose so I can steer them away from a regular corporation, because the double taxation, the same dollar of earnings is taxed twice.

But the general complexity of the payroll taxes tend to give clients a lot of trouble. I feel like every one of my clients get penalized by the IRS in the payroll tax area even though they are trying as hard as they can to comply. In fact, they hire me, and sometimes I get them penalized, too. It is frustrating because I am a paid professional, and I end up slipping up and getting the client penalized.

There are provisions like section 179 that allow businesses to expense their equipment purchases, but they have also got to buy inventory, and that is not immediately deductible. That is cash out the door that does not provide an immediate tax deduction. So you can end up in a situation where a corporation has paper profits, but no cash to pay it.

Chairman PITTS. Thank you.

Mr. Pages, you mentioned in your testimony that you recommend that the Subcommittee examine the issue of angel capital. For those of us not as familiar with that, can you explain?

Mr. PAGES. Angel capital refers to individual investors, often former entrepreneurs, who invest their own wealth in starting new companies. We found through this study there is a huge amount of angel capital available in this country, around $50 billion. If you compare that to the amount spent last year in venture capital, which I believe was roughly $16 billion in new investments, you have a huge differential there. So there is much more angel capital available for start-up businesses than there is venture capital. Venture capital is largely for bigger deals and is not available for the types of start-ups that we hope to help through this legislation.

As Ms. Kerrigan noted, it is very hard to break into networks to put the business together with the investor, and if there is some way to create networks so we could spread, if you will, the wealth from all of this angel capital that is available to other parts of the country, it would be a very helpful step that the Subcommittee could take.

What we find now is that the places where there is lots of venture capital, Silicon Valley, Austin, the Boston area, there is a lot of angel capital, too. And in effect you are caught in a chicken and egg situation. People get rich and they invest back in the areas where they grew up, and the places that don't have those entrepreneurs located there, it is very difficult for them to get started in terms of creating an angel capital network.

Chairman PITTS. Ms. Kerrigan, how many members of the Small Business Survival Committee are start-ups or small businesses within their first few years of existence? How many of your members would be able to take advantage of the SUSA accounts, and do you feel that they would benefit from this legislation?

Ms. KERRIGAN. I would say the majority of our members are those small businesses or small firms who have endured the first 4 or 5 years, the ones who have gotten off the ground, who can become more active in an organization such as ours and pay membership and stay informed on policy issues and legislation and how it impacts their business.

I would—and this would be a guess, we can go back and do this research certainly with our membership, but I would guess probably about 5 percent of our membership are those businesses who are in the start-up years and who want to know what is going on in the Nation's Capital and State capitals nationwide and how that may impact their business; SBSC members also include a lot of investor types who invest in these types of businesses.

So what we want to do, obviously, is grow our membership to large numbers, and include the start-ups. That is part of our mission and goal, to not only represent our membership, but also represent the needs of all small businesses nationwide. So I would say 5, about 5 percent or so are in that start-up phase right now.

Chairman PITTS. Thank you.

Now I would like to recognize the Ranking Member of the Subcommittee, the lady from California, Ms. Millender-McDonald.

Ms. MILLENDER-MCDONALD. Thank you, Mr. Chairman. I am sorry that I was late getting here.

Ms. Kerrigan, I want to start with you. You mentioned just a few minutes ago talking with the Chairman about the need to look into small businesses and what will perhaps work for them or to find the exact needs for the small businesses. As we do recognize the first 5 years of small businesses really are tenuous, if you will, because of the obstacles that are there. When you do your needs assessment, are you going to do—what small businesses are you going to do, across the board, women, minority, all, or what?

Ms. KERRIGAN. When we do a needs assessment, we look at the needs of our members, which generally relate to taxes and regulation and other obstacles that are put up by the government in terms of affecting their growth and success and their competitive-

ness, but we look at what the obstacles are faced by many start-ups as well.

We base that needs assessment on looking at what the climate is for small firms. Obviously with 99.9 percent of business closures being small businesses, we have a concern that, and one of our priorities it, to help those who are just getting in business get off the ground and become successful.

So we believe that our tax and regulatory agenda pretty much is generally representative of all different types of businesses. Whether it is agriculture, minority-owned businesses, women-owned businesses, these are broad issues that impact all businesses. I hope that I am answering your question correctly.

Ms. MILLENDER-MCDONALD. In a sense, but let me just ask you this. As you stated in your testimony, access to capital is one of the most important obstacles, and we need to recognize that. The basic assumption of this bill, however, is that a business must be in the black in order to be able to use these accounts. Do you think that during the first 5 years small businesses on the average have enough earnings to make this bill a practical solution?

Ms. KERRIGAN. Yes. Are you asking if this will address the capital needs?

Ms. MILLENDER-MCDONALD. Yes.

Ms. KERRIGAN. Absolutely it will. It would be a practical solution, because if you do have a business, for example, that is forced to spend its money year end, as was noted by our expert CPA at the end of the table, rather than putting it aside and keeping it for a need later down the road, this just makes sense, giving them incentives to think ahead not only in terms of financial planning, but also for self-financing opportunities.

Yes, I think this is a practical solution for many—is it going to be something for all firms? No. But it will address the needs of many small businesses out there.

Ms. MILLENDER-MCDONALD. But it will not necessarily address the needs of some minority firms that I have talked with given that they do not find themselves in the black for the first 5 years, so they are not a position in terms of any access to capital?

Ms. KERRIGAN. It is not the silver bullet. I don't think that it will address all needs, but I think it will help many small firms.

Ms. MILLENDER-MCDONALD. And I suppose I get back to the needs assessment then, you will certainly look into how can we help small minority businesses to survive in that they will be the employer of many of those who will be seeking jobs. Critical of that is of women and men coming off of welfare to work. It is important that we look at a needs assessment that is representative of a minority group.

Ms. KERRIGAN. Yes, a broad-based needs assessment not only in terms of further reducing capital gains taxes or targeting capital needs towards urban areas, but also looking at what local governments can do to lower the tax burden in cities, and in terms of what they are doing perhaps to assist in either business closures or not enabling their own communities.

Ms. MILLENDER-MCDONALD. And I would be interested in seeing what local governments are doing for this, given that they are strapped themselves most often.

Ms. KERRIGAN. I will get this to the Committee. We have not brought it down to the city level yet, but we do conduct a small business survival index. It looks at the climate for entrepreneurship for all 50 States, and we rank them based on which are more business-friendly than others. We look at a lot of different programs and policies and how these impact small businesses.

This is, I think, an important tool. I think this will work for many small businesses, and, in fact, I think it will help many minority and women-owned businesses.

But there are a lot of other measures and initiatives that the Congress is pursuing right now, things that the Small Business Administration is doing, things that the administration is doing that I think address this broad-based need. I would agree with you.

Ms. MILLENDER-MCDONALD. Mr. Pages, as I have said in the questioning, speaking with Ms. Kerrigan, that start-up businesses are the most tenuous in that the first 5 years are very critical, and oftentimes they find themselves not in the black after 5 years. But as you stated in your testimony, after the first 3 years, the success rate tends to improve. How would this bill help those companies during the first 3 years when most of the earnings would be used to pay off their debt?

Mr. PAGES. In many ways I would think I agree with Ms. Kerrigan about the impact of the bill. If you think of start-up businesses in three categories, you have those that are going to succeed with or without some stimulation or support from the government, and those that are going to fail. There is a middle category of firms who are on the edge. I think that is the appropriate target for this legislation, companies that are showing slight profit in the first 5 years.

Ms. MILLENDER-MCDONALD. So it is not for all small businesses then?

Mr. PAGES. I think that is right. As you have noted, many of these companies do not show a profit during the first 5 years. I think we need to look at other ways to support those companies. This is targeted at those companies that are showing fluctuations in income in the first 5 years. They do need to be profitable to be supported by this bill.

Ms. MILLENDER-MCDONALD. Is there any specific industry area which would find these accounts more useful than others, Mr. Pages?

Mr. PAGES. Well, we haven't looked at that. My general sense would be that more volatile industries might have greater benefit of—these types of provisions because they would see their earnings fluctuate more greatly over a 5-year period. You think of the classic Internet businesses or information technology businesses where there is a lot of turmoil in the company and a lot of ebb and flow of its profits. This is the type of safety net, if you will, that might help those types of sectors rather than a more established traditional sector of the economy, but we have not looked at this in great detail.

Ms. MILLENDER-MCDONALD. While we have many pieces of legislation coming before us with small businesses, and we do recognize small businesses will be the catalyst by which the economy continues to spur in the new century, we have to look at how we can

get those small businesses that are going to employ that work force that is going to be the majority women and minorities. And given that this bill does not specifically target individuals whose main source of income is a small business, but rather allows a deduction of funds received from a qualified small business, would requiring that the funds deferred not only come from a small business but be the main source of income for the individual serve the underlying purpose of the bill better or what?

Mr. PAGES. I think the bill is appropriately targeted. I think it will have a big impact on women and minority entrepreneurs. If you look at start-up business rates, minorities, particularly African-Americans, show much higher rates of entrepreneurship than whites and Hispanics, particularly as education level goes up.

What we do find, however, is that they are undercapitalized.

Ms. MILLENDER-MCDONALD. I was going to say that they do not succeed because of not having access to capital.

Mr. PAGES. That is correct. So this is one way to help them preserve the limited resources they have. It is not going to save everyone, if you will, but it is one other way to sort of conserve that precious cash that they need, particularly if there is a downturn. If we do have an economic downturn, the companies that are most poorly capitalized are going to be the first to fail. So this is very important to help these kinds of companies conserve their cash.

Ms. MILLENDER-MCDONALD. Mr. Horton, you stated that H.R. 2373 would be a great benefit to regular C corporations in managing their cash flow. You also stated that the bill would allow corporations to achieve the same tax effects as compensating to the employees the corporation's benefits while keeping the cash inside the corporation for future use.

As I understand the bill, the only eligible entities allowed to use the tax-deferred under the SUSA accounts are individuals. Am I correct, or would the provisions under this bill allow corporations to defer their profits through the SUSA accounts?

Mr. HORTON. My understanding is that it is available to all entity types, unless I am misunderstanding that.

Ms. MILLENDER-MCDONALD. Both individuals as well as corporations?

Mr. HORTON. Right.

Ms. MILLENDER-MCDONALD. If you were to buy stocks from a small business corporation, would I place my dividends in a SUSA account, Mr. Horton, even though this is not a main source of income, and I have no direct stake in the day-to-day managing of the corporation?

Mr. HORTON. The corporation itself—if my understanding of the bill is correct, the corporation itself would put the money in the SUSA account, not the stockholders.

What I was referring to about compensating out the earnings, what typically happens at year end is the corporation looks at where it is earningswise and tries to compensate its owner/employee as much as possible in order to increase the compensation to the shareholder and decrease the earnings to the corporation to avoid the double taxation. Am I answering your question?

Ms. MILLENDER-MCDONALD. To some degree I am following what you are saying, anyway. Did you want to finish up because I am concluding here. You have answered as you see fit?

Mr. HORTON. Right. In the C corporation environment the double taxation is an incredible motivation to taxpayers to try to lower the corporate earnings, and that is why I think a lot of the statistics at the corporate level are somewhat doubtful, because these corporations do whatever they can to keep their earnings as low as possible in the corporation.

Ms. MILLENDER-MCDONALD. Mr. Chairman, thank you. Many small businesses agree that the SUSA bill is a good bill and has the potential to lead to many positive outcomes for small businesses, like the ability to use the tax-deferred funds for leveraging with larger companies. However, most start-up businesses struggle in the first 5 years, as I have said before, and this is what concerns me about the bill. I think we should look at the—I think we should look at the current support mechanisms that are in place to see why more businesses are not succeeding, and with that I thank you.

Chairman PITTS. Thank you.

Because of the excellent attendance of the membership, we are going to start using the lights. We are asking go ahead and use your time limit on the first round. If we need to, we can go to a second and third round.

Mr. DEMINT. Thank you, and thanks again for your encouragement of this bill. And one of the things in addition to just getting your endorsement today is to find ways to help make this bill better. We do want to look at the language that was questioned. The intent of the bill is that it relates to a business entity. The point is to encourage people to leave capital in a business entity rather than have tax-motivated spending or to pass it through as salary.

My experience in business as a solo consultant, my first couple of years in business, is we didn't make a lot of money. At the end of the year, it was just a matter of do we leave a few thousand dollars in the company, or do I take it out as salary.

The accountant always said take it out as salary because you may need it as salary in a couple of months, and you would have paid taxes twice on it if you do that. So consequently, as I went through those first few years of business, there was seldom enough capital to move ahead to hire people, and I think the growth was slower. It was not necessarily just a matter of survival, but there was tax-motivated spending of buying something that we didn't need to reduce our profits or maybe we didn't need then. But the point here is to try to encourage people to leave money in a company without bad tax consequences so that company would be stronger, better able to hire people, and would be stable in the future, and we want to be make sure that the language of the bill reflects that.

One question, we want to make sure that we don't have unintended consequences of this bill or unnecessary complexity. One of the things you mentioned, Mr. Horton, that got my attention is that there might be some reluctance to use these accounts because the tax rate may be lower in the first year than it is the fifth year when the money is taken out.

Would it be your recommendation that it be taxed at the rate when it was put in, or is there some way that we can improve this so it is not a risk to the company to save capital?

Mr. HORTON. I think it would be beneficial to cap the amount of tax paid when the funds come out the SUSA account to the amount that would have been paid had the funds not gone into the SUSA account. That certainly creates a little bit of administrative complexity, but I think that is probably manageable.

If the taxpayer were in the 15 percent bracket when the money goes into the account, and they are in the 35 percent bracket when the money comes out of the account, they have deferred themselves into 20 percent of extra tax liability.

Mr. DEMINT. Well, that is a great point.

Does any other panelist have any concerns about unintended consequences or unnecessary complexities in what we are trying to do?

Ms. KERRIGAN. No. I wouldn't—when we talk to a lot of our members about various things that we can do to fix the Tax Code to help small businesses, there is always the question, well, gee, shouldn't we—rather than further mucking up the system or making it more complex, shouldn't we just overhaul the entire system or do some type of simple flat tax? Since the Congress really hasn't come to any agreement of whether that should be done, what type of tax system we should have, we still think that there are things that have to be done. We can still do things to help small businesses.

This is an immediate need, and the Congress needs to react in an immediate way and not let this whole debate over complexity and what type of system we are going to move to paralyze them in their efforts right now, because there are small businesses who need their help, in terms of looking at various parts of the Tax Code, whether it is estate tax relief, SUSA accounts, capital gains tax, whatever.

Mr. DEMINT. All right. Good.

Mr. Chairman, I yield back.

Chairman PITTS. Mr. Baird.

Mr. BAIRD. Mr. Chairman, I neglected earlier to ask unanimous consent to introduce Mr. Nichols' letter into the record.

Chairman PITTS. Without objection.

[The information may be found in the appendix.]

Mr. BAIRD. I have a couple of questions, and my good friend Mr. DeMint—it shows why we are working together on this—precisely picked up on the question that you addressed, Mr. Horton, and my staff and I kicked that very issue around this morning, in fact, and it is something we might want to explore.

One of the things that I want to pick up on a little bit is, as Mr. DeMint said, to me the issue is how do we provide an engine to the economy, not how do we proliferate small businesses. And there may be some small businesses that do not succeed perhaps through bad management, maybe they have a product that nobody wants, et cetera. But there will be a subset of businesses who are succeeding and are, in fact, generating revenue, and those maybe are more likely candidates of engines of job creation.

The way I see this bill is it is targeted at precisely those businesses who are having early success, who have the potential to ex-

pand on that early success, if they can find a way to better manage and access their own capital, rather than spending themselves into a precarious debt position or lack of capital situation.

So yes, I agree with the Ranking Member that there will be needs to help other businesses who are not profitable early on find capital, but part of what I am seeing here, and certainly what many business owners locally have told me, is that this empowers the successful business that is already demonstrated an achievement to be even more successful.

Does that square with your experience and as you look at this bill, your thoughts about it?

Mr. PAGES. Yes, I think you have got it exactly right. Not all entrepreneurs are created equal is one way to look at it. There is a certain subset that we call high growth, and those are the companies that really generate most of the economic development, most of the net new jobs. You need a base of all sorts of small businesses for those types of entrepreneurs to prosper, but it is really a small subset of these companies that are the net creators of new jobs in this country. Again, the term I used in my testimony was "gazelle" firms, but it is really fast-growing, high-growth entrepreneurs is really what you need to encourage to foster local economic development and to create lots of new jobs and innovation and technology.

So this is the subset you really want to focus on.

Mr. BAIRD. Let me ask one other question.

Mr. Nichols, from my district, raised an interesting question. He thought that this might be—the access to this opportunity might be a way to leverage more competitive loan rates. Any thoughts on that? It was a possible use that had not occurred to me, but it is intriguing. Any thoughts on that from you folks?

Mr. HORTON. Well, one thought, there is a provision in the bill that prevents the account from being pledged as collateral on a loan, and I think that if that were removed, then perhaps you are right, this could be used to secure a loan and get more favorable interest rates. My reading of the bill right now is that it is similar to an IRA where if you pledge it as collateral on a loan, then it is treated as distributed.

Mr. BAIRD. What would be the pros and cons of that as you see it, Mr. Horton?

Mr. HORTON. Well, if you could use it as collateral, then you could leave it in the account, leave it in the corporate form and still get a loan with more favorable terms. If you leave it the way it is now you may see the money coming out of the accounts rather than staying in the accounts.

Ms. KERRIGAN. I was just thinking, it may not be something that could be pledged against a loan, but on the other hand, if you do have a SUSA account and depending upon the size of that account, and what money you have set aside as a business owner for future cash needs, I do think that planning says something about business management and the business itself in terms of how you are thinking ahead like financial planning, planning for future crises or what have you. So I don't know if it serves as a direct pledge, but more of an indicator that this business has its act together. It is thinking ahead, and it is using all the tools available to succeed in the future.

Mr. BAIRD. So the lender will look at that, and even though they are not saying, we could directly access that capital to pay back the loan, they could say, here is a business that is planning ahead, that is not operating right on the margin, and that is a sense of security for a lender.

Ms. KERRIGAN. Yes, in terms of looking at that, but plus all the broader business practices as well.

Mr. HORTON. Even on a more basic level than that, it will show up on the company's balance sheet, which makes the balance sheet look more favorable to a lender.

Mr. BAIRD. I want to just close by thanking you all. I know that Mr. DeMint and myself really do want this bill to help businesses. And, Mr. Horton, you apologized earlier for being so detailed and technical, but no apology necessary. I am sincerely grateful to you and each one of you for what I think are very insightful analyses. And I want to invite you, after you go home, going home on the airplane or whatever, and you may be saying, gosh, there are some ways to make this better. Mr. DeMint and I would be very open to your suggestions about how to improve it, if it has problems. We are not here to have anyone say what a great bill we have done, we are here to learn from you and, if it has problems, to improve those and make the bill even better. So I look forward to your interaction. Thank you, Mr. Chairman.

Chairman PITTS. Thank you.

Mr. LoBiondo.

Mr. LOBIONDO. No questions.

Chairman PITTS. I think the other Members have gone. We will start the second round.

Mr. DeMint.

Mr. DEMINT. I think in the interest of time and our panelists, really my questions have been answered, except to Mr. Baird's point. If there is anything else that has crossed your mind as a way to make this bill better, it is really draft legislation at this point. The hearing is one step on improving it. So any concerns you have, don't leave without expressing them, and if any of you have any thoughts on the way home, let us know, because in the next week or two we want to refine the language and finalize it. But you have really covered a broad spectrum and added a lot of encouragement and confirmation to us to move this bill through as one tool for new businesses to be successful. So thank you.

Any other comments?

Chairman PITTS. Ms. Millender-McDonald.

Ms. MILLENDER-MCDONALD. Mr. Chairman, I just want to emphasize that when you say success accounts or start-up businesses, you are really talking about successful businesses, you are not talking about fledgling businesses, because in a sense this bill will not really be a source of support for one who has not been in the black for 5 years or better, but rather those who have seen success as they have gone along.

So this still does not address a small business that is not in the black, but rather successful businesses as they continue to thrive and pretty much offer new jobs, but the jobs aren't in areas where it is most needed. So while this will not be that panacea, I am just

suggesting the bill is really for more or less successful small businesses or those that are thriving and not those that are fledgling.

Chairman PITTS. Mr. DeMint.

Mr. DEMINT. Just to respond briefly, I think we all agree, it won't apply to all businesses, but it only does apply to new businesses, and perhaps the benefit will be to those that have a faster start. But it is not unusual for a business at any time to have a good year and then a very bad year, or to start out, as I did, with a contract that ended after the first year, to have significant profits in one year and then be out trying to borrow money the next year. It is just a bad system that discourages those companies in the first 5 years, if they do have a profitable year, to get all of the capital out of the company instead of trying to maintain some so that they can get through the next year. It would be very unusual for any new business to just start off and have five great profitable years, and if they do happen to have a good year or two, we would want them to reinvest and grow even faster.

I think it will help the company that is making almost no money. If only you set aside $1,000 or $2000, if you are a solo practitioner and keep it in the business instead of as a salary, it does give you a little staying power.

So I think the application will be, again, not totally inclusive, but I do think it would help the solo entrepreneur as well as the companies that start off fast and then have a bad year somewhere in those first 5 years.

Thank you.

Chairman PITTS. Thank you.

Mr. Baird.

Mr. BAIRD. I would like to echo what Mr. DeMint said. I appreciate your concern. I actually see this bill as having great potential to help women and minority start-ups. You needn't have a profitable 5 consecutive years. At any point where you experience profit, you can use that profit to put into a SUSA account, and the model I would have that I think would benefit greatly minorities and women entrepreneurs would be, for example, the very small corner grocery store that you see people with their—the mom is in there, the dad is in there, the kids are in there. They are starting from 5:00, and they are working until 10:00 at night, and they are purposefully starting small, and they are being tremendously frugal, and they are taking those savings and they are putting them aside. They have been successful right from the get-go because they have started within their means. They are working tremendously hard, they are putting sweat equity into it, but they are also willing to forego the short-term profit so that they can later expand. So for 3 or 4 consecutive years, they could keep their operation relatively small, put a lot of sweat equity into it, take this money, set it into a SUSA account, and then after 4 years expand, and that is when they draw on the SUSA account, because they have saved the personal money to expand versus every year being right on the margin.

Or let's say you have a woman working a business out of her home. She has a little office, she has not a lot of expenses, but she does generate a profit. She sets those aside in a SUSA account.

After 3 or 4 years it has built to the point she can establish an office outside the home.

I see plenty of applications, if people are frugal and successful early on, to use this, and I think it has a lot of potential for women and minority-owned businesses.

Chairman PITTS. Would any of the witnesses like to comment on that?

Mr. PAGES. I would just simply offer that if there is a company that is growing on an aggressive growth path and profits in the first 5 years is probably going to quickly grow too big to access the accounts, and I think the accounts should not be designed for that type of company. I think Congressman DeMint has the right picture of this. The typical account user will likely have ups and downs in the first 5 years of existence and is really much more tenuous than the really fast-growth company that kind of just gets hot right from the start. That is not our vision of where this legislation would apply.

Chairman PITTS. Ms. Kerrigan.

Ms. KERRIGAN. I would agree with everything Congressman Baird said. I would like to change the assumption here to the fact that women-owned businesses in this country are tremendously successful, so I think we need to think about this more in a positive way in terms of how it will impact many women-owned small businesses.

There is a huge success story here in terms of female-owned firms and women-owned businesses, the amount of economic growth that they are responsible for in job creation, and all that other good stuff. And looking at the growth, the phenomena of women-owned businesses and also the growth of many minority-owned businesses, you have to assume with that growth and their success that there is going to be a portion of those businesses who will benefit from this.

But I again would like to add, do we need to be doing more for small businesses beyond this? The answer is absolutely yes. There are obstacles and government-imposed burdens and a lot of things at the local level, I think, that are hurting their chances for success and survival. Someone who considers themselves a fledgling business in their first year and may not make a profit, perhaps this is something good in their second year or third year that they can benefit from.

So anyway, I am just reaffirming or supporting the comments of the Congressman.

Chairman PITTS. Thank you.

Mr. Horton.

Mr. HORTON. One thing I wanted to point out, the term "small business" is very broad. It is true that this bill would not help businesses that are losing money, but let us not forget that, at least with most of my clients, that some of them have an idea, and they are trying to start this big business, and they are willing to lose money for years and years and years trying to get it going, but most of them are men and women who want to open five restaurants in a town or five auto repair shops. They may be able to stand losing money in year 1 and possibly year 2, but if they are

not making money after that, they are going to give it up, because they need this to earn a living.

So I think under the tent of small businesses, there are a lot of different businesses, and I don't want us to forget about the men and women who are starting businesses to provide them with money to eat, not necessarily just to come up with a good idea that may make them rich.

Chairman PITTS. All right. Are there any other questions? Any closing comments from anyone?

If not, this has been an excellent, excellent hearing. We thank you for your very informative testimony. We will keep the record open for 5 legislative days for anything you would like to add.

Chairman PITTS. Mr. Pages, you have a couple of reports that you would like to make a part of the record.

[The information may be found in the appendix.]

Chairman PITTS. If there is nothing else, the Subcommittee hearing is adjourned. Thank you.

Ms. KERRIGAN. Thank you.

Mr. PAGES. Thank you.

Mr. HORTON. Thank you.

[Whereupon, at 11:15 a.m., the Subcommittee was adjourned.]

Hearing on the *Start-Up Success Accounts (SUSA) Act of 1999*, H.R. 2723
Opening Statement of Chairman Joseph R. Pitts
November 2, 1999
2360 Rayburn House Office Building

Good morning ladies and gentleman and welcome. Thank you for joining the Empowerment Subcommittee today for a hearing on the *Start-Up Success Accounts Act of 1999*, or SUSA. This bill was authored by the Vice Chairman of this Subcommittee, my friend from South Carolina, Mr. Jim DeMint, and by another member of the Small Business Committee who joins us today, Mr. Brian Baird.

I am going to yield most of my time to Mr. DeMint for his opening comments, as it is his bill and he can speak in much more detail about it. But first I would like to thank both Mr. DeMint and Mr. Baird for their work on this legislation and their leadership in the area of tax relief for small businesses. One goal of the Empowerment Subcommittee is to promote legislative initiatives that enable entrepreneurs to realize their dream of becoming small business owners and to sustain their small businesses, once operational. The Start-Up Success Accounts Act, of which I am a cosponsor, is an example of this type of worthwhile legislation, one which seeks to lessen the burden felt as a result of a complicated Tax Code that is not small business friendly. Excessive taxation is especially detrimental to the success of NEW small businesses, which typically encounter numerous difficulties as they struggle to grow in the first few years.

Quite often, business owners are counseled to reinvest their profit into the business by purchasing equipment or giving bonuses, thereby avoiding taxation on the business' profits. But what if there was a way for small business owners to both avoid immediate taxation and save some of the money they earn? This is exactly what H.R. 2373 proposes. This bill would allow a new small business the opportunity to use a tax deferred saving account for a period of time during the beginning stages of business development. By utilizing this Start-Up Success Account or SUSA as money- management tool, start-up, small business owners would be able to retain capital by putting up to 20% of their annual taxable income, up to $200,000 per year, in a SUSA. This supply of capital may help withstand periods of slow business or increased competition by allowing them to save when business is profitable.

I want to welcome our witness panel: Ms. Karen Kerrigan, Chairman of the Small Business Survival Committee; Mr. Erik Pages, Policy Director of the National Commission on Entrepreneurship, and Mr. Pepper Horton, a Certified Public Accountant from Greenville South Carolina, and entrepreneur himself. Thank you all for being here. I look forward to you testimony. Mr. DeMint.

We will now turn to the Ranking Member of the Subcommittee, my friend from California, Ms. Millender-McDonald, for her opening comments.

Representative Jim DeMint
OPENING STATEMENT
EMPOWERMENT SUBCOMMITTEE HEARING:
START-UP SUCCESS ACCOUNTS ACT
NOVEMBER 2, 1999

Mr. Chairman, thank you for having this hearing today.

Earlier this year, Representative Baird and I introduced H.R. 2373, the Start-Up Success Accounts (SUSA) Act of 1999. The purpose of this legislation is to give small businesses an additional tool to manage finances and retain capital.

According to the Census Bureau, over 99.9% of business closures are small firms. One of the primary reasons for business failure is lack of capital. The problem is further aggravated by a tax system that discourages capital retention. The ultimate result is less growth and less staying power. Operating with no capital, even a small downturn in sales can often put a new company out of business.

H.R. 2373 would allow new small business start-ups to place the lesser of up to 20% of profits or $200,000 into a tax-deferred "SUSA" savings account for the first five years of business. This would allow new small businesses that are profitable in one year to set aside some profits to prepare for a down-turn in later years. Money could be set aside in the account for up to five years after deposit.

The idea for this bill came from my own experience as a small businessman and starting my own company. It is similar to a bill by our colleague, Kenny Hulshof, which would help farmers and ranchers manage capital with FARRM Accounts. In starting my own business, I know how hard it is to manage your finances as you try to keep afloat in the first few years. It isn't easy, especially with our current tax code, and I believe anyone who takes on this challenge deserves our respect and support. I appreciate the work of this Committee in exploring ways to remove the obstacles that often stand in the way of success for small businesses.

Small business accounts for virtually all of the net new jobs in the United States today. With women- and minority-owned businesses making up one of the fastest-growing segments of small business, and with new small business start ups at the heart of revitalizing under-served urban and rural communities, it is important to consider new approaches to remove obstacles to success. That is why I am especially pleased that this hearing is taking place in this Subcommittee. I am pleased that we are looking at new ways to empower those who are working to revitalize our nation.

If I could make one further comment, I would like to thank all the witnesses who have agreed to testify here today: Karen Kerrigan from the Small Business Survival Committee, Erik Page with the National Commission on Entrepeneurship, and Pepper Horton, who came up from Greenville, South Carolina. Mr. Horton is familiar with the challenges facing new small businesses, both as an accountant and as a new small businessman himself. Thanks for coming, and I look forward to all of your insights.

Thank you again, Mr. Chairman.

BRIAN BAIRD
THIRD DISTRICT, WASHINGTON

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

WATER RESOURCES AND ENVIRONMENT SUBCOMMITTEE

COAST GUARD AND MARITIME SUBCOMMITTEE

SMALL BUSINESS COMMITTEE

web address: http://www.house.gov/baird
e-mail address: brian.baird@mail.house.gov

Congress of the United States
House of Representatives
Washington, DC 20515–4703

DISTRICT OFFICES:

1220 MAIN STREET
SUITE 340
VANCOUVER, WA 98660
(360) 695-6292

605 COLUMBIA STREET NW
SUITE 220
OLYMPIA, WA 98501
(360) 352-1768

WASHINGTON, DC OFFICE:

1721 LONGWORTH HOB
WASHINGTON, DC 20515
(202) 225-3536

REMARKS BY REPRESENTATIVE BRIAN BAIRD
HEARING ON H.R. 2373, THE "START-UP SUCCESS ACCOUNTS ACT OF 1999"
COMMITTEE ON SMALL BUSINESS
U.S. HOUSE OF REPRESENTATIVES
NOVEMBER 1, 1999

Thank you, Mr. Chairman. I ask unanimous consent to revise and extend my remarks.

I want to thank the Chairman for holding this hearing and for obviously recognizing the extraordinary challenges faced by new businesses today.

I also want to thank my friend from South Carolina who, as a former small businessman himself, is tremendously knowledgeable about the perils facing new businesses and who has worked incredibly hard to develop and introduce this legislation. We've seen some problems that face small businesses in both of our districts, and I thank him for inviting me to work with him on this initiative – it's been a pleasure to do so.

First of all, I want to join my colleagues in thanking our witnesses for being here today to help bring additional attention to the difficulties that small entrepreneurs tend to have in getting a business off the ground, especially in those first 5 years – and to examine this legislation that will give owners of newly formed small businesses a new way to channel capital back into the growth of those businesses.

The gentleman from South Carolina and I share a common interest of helping small businesses get off the ground and to thrive in our nation, and this legislation is a step in that direction.

As one who grew up with small business owners, I am aware of the struggles that one goes through in trying to build a business. My folks owned a small clothing store as I was growing up, and went on to run a small ice-cream and sandwich shop. They certainly had their good years, and their bad...and tried desperately to make ends meet during those less profitable years – but if there's one thing that I learned in watching them, it's that owning a business is no picnic. It can be highly rewarding, but there are just so many hurdles to jump in getting yourself established while trying to feed your family and look for new growth opportunities.

We point out time and again on this committee that small businesses are the economic engine of our growing economy, and that's certainly true in Southwest Washington. However, even throughout this period of growth, I've watched the majority of those new small businesses fail in the first few years of existence.

PRINTED ON RECYCLED PAPER

One of the primary reasons that I became interested in this legislation is that, as currently structured, the tax code seems to penalize capital retention, while encouraging inefficient and sometimes ineffective spending. I'm not saying that the code is structured in a manner that, in itself, hurts small businesses, but I do believe that in many cases, small business owners feel compelled to reduce taxable assets as much as possible at the end of a tax year, and that this may not be a part of the ideal growth strategy for a small business.

My sense is that the business owner should have the flexibility to allocate the assets for business growth at times and in ways that are most effective for the growth of the business. I truly feel that the tool created by this legislation would put one more instrument in the toolbelt of new small business owners to give them a better chance of surviving those first five years.

I'm also concerned about reports of small business owners amassing extensive credit card debts, while perhaps, at the same time reinvesting capital flows to reduce taxable assets. I've heard that somewhere in the neighborhood of 40 percent of small business owners use personal credit cards to generate capital for the business, since they often have such a difficult time accessing sources of capital.

In fact, if the Committee would indulge me for a moment longer, I would like to read a brief excerpt from a letter sent to me by a constituent from Vancouver, Washington. Frank Nichols just opened a business that manufactures custom circuit boards for Original Equipment Manufacturers on a contract basis. He writes:

> "We have tried the traditional sources of funds. The banks are only interested if you have collateral of a value that is greater than the amount you want to borrow, preferably in CDs. The local economic development sources of funds are not available to start-ups or are limited to the rural or economically depressed areas...We have tapped our own sources to the max. Everything we own is now mortgaged or used to secure the leases or part of our original capital investments. Our credit card balances are climbing..."

Mr. Nichols goes on to add that he could take investments from venture capitalists, but does not want to give up control of his company in return. He also points out that the bill might allow him to use the accounts created under this bill as collateral for more competitive rates on commercial loans, which is an interesting idea, and I hope that our witnesses can further comment on that possibility. I'd ask my colleagues for unanimous consent to enter Mr. Nichols' letter into the record at this time.

Again, I thank the Chairman and the Ranking Member for holding this hearing. Obviously, I think that this is is the common sense thing to do for our nation's entrepreneurs, but I'm very anxious to hear the comments of our witnesses.

I yield back the balance of my time.

Hearing on the
The Start-Up Success Account Act of 1999 (H.R. 2373)

Testimony Presented before
The United States House of Representatives
Committee on Small Business
Subcommittee on Empowerment
Chairman
The Honorable Joseph R. Pitts

November 2, 1999

Presented By
Karen Kerrigan
Chairman
Small Business Survival Committee

1920 L Street, N.W., Suite 200 • Washington, D.C. 20036
Tel: (202) 785-0238 • Fax (202) 822-8118
www.sbsc.org

On behalf of the Small Business Survival Committee (SBSC) and its more than 50,000 members, I am pleased to have the opportunity to testify in support of the Start-Up Success Accounts (SUSA) Act of 1999. I am Karen Kerrigan, Chairman of SBSC, a nonpartisan, nonprofit small business advocacy and watchdog organization headquartered in the nation's capital.

Many times SBSC members, staff, and members of our board of directors have had the honor to testify before the Congress regarding the hurdles faced by the small business, entrepreneurial sector of our economy and the ways that our elected officials can help create an economic and policy environment favorable for their growth, success and survival. SBSC is pleased that the Congress continues to place the needs of small business at the top of its agenda and we are encouraged by bipartisan initiatives such as the SUSA Act of 1999 (H.R. 2372) that would make a meaningful difference for many young enterprises across the country.

Access to capital remains a serious obstacle for many small firms, as it was in 1995 when the delegates to the White House Conference on Small Business ranked the issue as one of its top priorities. Out of the sixty recommendations that were presented to the President and Congress by conference delegates, fifteen of those related to capital needs.

Many of the efforts undertaken by the Congress since that conference to lower the tax and regulatory burden on small businesses (i.e., cutting capital gains taxes) have been a plus for SBSC members and small businesses in general. Passage of the SUSA Accounts Act of 1999 sponsored by Representatives Jim De Mint and Brian Baird is a creative and common sense solution that would assist many small businesses through the tumultuous and challenging early years of their development.

Because the tax code discourages capital retention, many small businesses are often faced with cash shortfalls at critical phases. These periods include times when a business needs extra capital for expansion and growth; or cycles when business activity many slow down and there is little flexibility in managing fixed expenses; or simply periods of adjustment when the business needs an infusion of cash to react to changes in the marketplace. The SUSA option, whereby new small businesses would be allowed to place up to 20% of taxable income into tax-deferred savings accounts for each of the first five years of operation, opens up new financial planning and financing opportunities for small firms most in need of these tools.

This Committee has studied the difficulty that many small firms face in securing adequate capital to finance their growth. As most committee members know, many banks require a documented track record of success while venture capital and angel relationships are extremely competitive. These networks are often difficult to penetrate. Unfortunately, the tremendous success of venture funds in raising significant amounts of capital have made small investments less attractive.

Even though venture capital has dramatically increased over the past decade (from $4.5 billion in 1980 to $36 billion in 1990 and up to $44 billion in 1995 according to the National Venture Capital Association) small start-ups as noted above are the least desirable. This means that small businesses need more tools to be self-reliant for their capital needs. The Center for Venture Research of the University of New Hampshire "estimated that about 300,000 growing companies and about 50,000 start-ups need equity capital each year" in an analysis it conducted for the Small Business Administration. CVR projected that total funding needs for these companies amounted to $60 billion.

The SUSA Solution would help small firms get out of the trap of "passing through" excess capital to avoid double taxation, subsequently followed by a

frenzied search for capital to grow the business or keep it afloat. The owner/entrepreneur can spend an inordinate amount of time and resources seeking such capital during times of need. The SUSA alternative, in this regard, promotes self-sufficiency and efficiency. In addition, the funds in these accounts will probably give the small business owner more leverage in securing competitive loans.

As more and more individuals determine that small business ownership is a goal they would like to pursue – particularly women, as well as minority Americans – it is incumbent upon our elected officials to identify areas where public policy, particularly the federal tax system, may be unwillingly assisting business closures. There are steps that can be taken to save some of the 99.9 percent of small firms that close their doors, and it is within the means of Congress to help salvage some of these businesses. This is especially true in many of our urban areas where small business success and the nurturing of an entrepreneurial climate may be the only hope for the revitalization of inner cities. The same can be said for small towns and small to mid-sized cities where factories and businesses have either left the country or moved to more hospitable business climates.

There is a need for the SUSA Act of 1999. Since SBSC's inception just over five years ago, hundreds of small businesses have contacted our offices in search of capital for their promising businesses. It is little solace to such entrepreneurs when we explain to them that we only serve as a watchdog group advocating legislative measures to increase access to capital for businesses that are in the start-up phase. However, we have learned much from these entrepreneurs and feel strongly that the SUSA Act of 1999, H.R. 2373, is one way to equip such businesses with an option that allows each one of them to chart their own financial destiny and survival.

I congratulate Representatives Jim DeMint and Brian Baird for introducing and pursuing with great vigor H.R. 2373. SBSC supports this initiative and looks forward to working with Members of the U.S. House of Representatives to ensure its passage. SBSC also thanks each member who has co-sponsored the SUSA Act of 1999, as well as the leadership of Chairman Joseph Pitts in holding these hearings to educate the entire Congress about the continuing importance of capital access for small businesses and solutions such as H.R. 2373 to help entrepreneurs grow and succeed.

I look forward to answering questions from Committee members.

NATIONAL COMMISSION ON ENTREPRENEURSHIP

Statement of

Erik R. Pages
Policy Director
National Commission on Entrepreneurship

Before the

Subcommittee on Empowerment
Committee on Small Business
U.S. House of Representatives

November 2, 1999

444 N. Capitol Street, Suite 399 Washington, D.C. 20001 tel: 202-434-8060 fax: 202-434-8065 e-mail: pvb@sso.org

NATIONAL COMMISSION ON ENTREPRENEURSHIP

Mr. Chairman and Members of the Subcommittee, thank you for inviting me to join you today to present testimony on the Start-Up Success Account (SUSA) Act of 1999. It is a pleasure to be here.

My name is Erik R. Pages, and I am Policy Director for the National Commission on Entrepreneurship (NCOE). The Commission is a new organization with a three-year charter to help government policy makers better understand the need and interests of entrepreneurs and to inform public policies that support these needs. We were established by the Kauffman Center for Entrepreneurial Leadership, part of the Kansas City-based Ewing Marion Kauffman Foundation. Our Commission members include some of America's leading entrepreneurs, and we work with high growth entrepreneurs across the U.S. I have attached further information on our Commission for the record.

On behalf of all of our Commissioners, I want to thank the Subcommittee for holding this important hearing. We also commend Representatives DeMint and Baird for their leadership in sponsoring H.R. 2373. It is an important proposal that could play a critical role in supporting entrepreneurs across the nation.

The Boom in Entrepreneurship

H.R. 2373 is designed to provide support to one of the fastest growing sectors of the business world. As the Subcommittee certainly knows, we are now enjoying a true boom in entrepreneurship. Let me give you some recent data to support this point. In cooperation with the Kauffman Foundation, we recently released a study of start-up activity in the U.S. and nine other industrialized nations.[1] This study, the Global Entrepreneurship Monitor, found that America was far and away the most entrepreneurial country on earth.

---

[1] For global comparisons, see *Global Entrepreneurship Monitor: 1999 Executive Report.* Kansas City, MO: Kauffman Center for Entrepreneurial Leadership, June 1999. For a review of U.S. performance, see *Global Entrepreneurship Monitor: National Entrepreneurship Assessment -- United States of America.* Kansas City, MO: Kauffman Center for Entrepreneurial Leadership, July 1999. Reports are available at http://www.entreworld.org.

444 N. Capitol Street, Suite 399 Washington, D.C. 20001 1 tel: 202-434-8060 fax: 202-434-8065 e-mail: pvb@sso.org

This finding was not a real surprise. However, we were surprised by the pervasiveness of entrepreneurship around the United States. Each year, Americans start 600,000-800,000 new companies that hire employees. That adds up to roughly 14-16 start-ups for every 100 existing businesses. At the same time, an additional 2 million new businesses are started each year as self-employment ventures. Overall, about 8% of the American adult population (nearly 16 million people) are in some stage of trying to start a new business. This is a very robust level of new business activity.

The Power of Entrepreneurship

A high level of start up activity is only helpful if it adds to the bottom line: economic prosperity. Even though a majority of start up businesses fail, the overall impact of entrepreneurial firms is profound. As an example, the Global Entrepreneurship Monitor found that 1/3 of the difference in national economic growth rates could be attributed to the impact of entrepreneurship.

Entrepreneurs foster economic growth because they bring dynamism and new ideas into our economic system. This creates a competitive environment for innovation. If you look at the key industries of what many call "The New Economy"—biotech, computers, the Internet—the leading innovators were all entrepreneurial companies. Companies like Microsoft and Intel are now part of the Dow Jones Industrial Average, but they began life as small start-ups.

However, not all high-growth entrepreneurs are in the high technology sector. After all, Home Depot is another new addition to the Dow Jones Industrial Average. Although the business press focuses on technology and places like Silicon Valley, we believe that this boom is not just about technology. The real strength of the entrepreneurial economy is that it can exist in all industries and in all parts of the country. We believe that in the near future we will boast about hundreds of "Silicon Valleys" around the US.

Challenges for Entrepreneurs

As I noted above, the vast majority of new start-ups do not succeed. Again, this should come as no surprise as starting a new company is a very high-risk venture. We are continuing to study the factors that lead to business success and failure, but I can highlight some preliminary factors that appear to play a role.

Most business failures stem from factors internal to the company—poor business planning, management limitations, and so on. But, external factors also play a role. Our Commission is focusing its work on many of these areas, including

issues like workforce education, employee recruitment and retention, and adequate infrastructure. H.R. 2373 addresses what is probably the most critical external factor in a new firm's success: acquiring and retaining capital.

Access to capital is central to success. In general, capital is readily available for most businesses in this country today. For instance, venture capital investment is at historic highs. In 1998, total U.S. venture capital investment exceeded $16 billion. We expect to easily top this past record this year, as we have already seen nearly $13 billion in new investments for only the first half of 1999.

Unfortunately, this good news does not necessarily apply to all entrepreneurs. Our research has uncovered a capital gap that often exists for small start up companies. When a company is first started and has limited capital needs (under $50,000), funds can generally be obtained from family and friends or from less orthodox sources like credit cards. Thus, most people can access funds for new self-employment ventures.

However, when a company needs funding in the range of $50,000 to $1 million, sources of equity capital often dry up. Most venture capital funds are seeking larger deals and banks continue to shy away from high-risk start-ups. Angel investor networks are growing in importance, but not all start-ups have been able to access these sources of funds.

The Start-Up Success Accounts Act of 1999

As this analysis indicates, the SUSA bill is targeted on the right problem. The first five years of a company's life are the most tenuous. Even if they are profitable, firms must re-invest their profits into fixed assets, recruiting and training new workers, expanding distribution channels, and other tasks. Thus, even successful entrepreneurs face major challenges regarding cash flow during the first five years of existence.

If firms survive through this transition period, they tend to succeed. Indeed, firms that survive after three years show significantly lower failure rates. Moreover, many of these firms become what are commonly referred to as "gazelle" firms, *i.e.* companies with annual sales growth increases that exceed 20% for four years or more. The typical gazelle firm does not simply take off after finding a "hot niche." It is far more common to see a gradual development phase followed by robust (but not explosive) growth.

Creating more gazelle firms is critical to economic success. New fast growth companies are but a small subset of the US economy, comprising just 350,000 firms out of a total of 6,000,000 current US businesses with employees.

Yet, these fast growing companies created about two-thirds of new jobs between 1993 and 1996. In other words, a majority of net new jobs are created by a small subset of entrepreneurial firms that comprise only 5-15% of all U.S. businesses.

H.R. 2373 seeks to support new firms by creating a tax deferred account, known as the Start-Up Success Account, wherein small businesses can place annual deductions of up to 20% of income or $200,000 during the first five years. These funds would be drawn from operating income, and withdrawals would be treated as taxable income in the year in which they are withdrawn.

Start-Up Success Accounts could provide an additional safety net for businesses in the critical start-up phases. During a firm's first five years, it will inevitably hit some type of downturn that affects capital flow. Under current rules, entrepreneurs often use credit cards or take on new loans to weather the tough times. These new accounts would provide a direct source of alternative capital or they could be used as collateral to secure more competitive loan rates. By allowing the firm to avoid taking on new debt, we can help set the stage for more rapid expansion and job creation.

H.R. 2373 includes several provisions that are particularly important:

- The limitations on the availability of the accounts in terms of time period (five years) and size of company (under $5 million in gross receipts) make sense. We believe that this program must be tightly focused on new entrepreneurs.

- The bill contains some restrictions on use of these accounts. The Subcommittee might consider additional language to ensure that these funds are explicitly used for the new business and are not diverted for other purposes.

- The accounts could be particularly helpful to women and minority entrepreneurs. These business founders often start their firms with lower levels of initial investment, and thus face higher risks in the event of business downturns.

OTHER STEPS

In addition to its consideration of H.R. 2373, we urge the Subcommittee to consider other steps to support America's entrepreneurs. We recommend that the Subcommittee also examine the issue of angel capital, and steps that can be taken to create local angel investor networks around the country. We also urge you to review current technology transfer programs and examine how these efforts might

be better tailored to make them more user-friendly for entrepreneurs. Finally, we believe that the most effective programs for supporting entrepreneurs will be based at the state and local level. Our Commission will soon be releasing an analysis of state best practices in entrepreneurship, and we will certainly share these findings with the Subcommittee.

CONCLUSION

On behalf of the National Commission on Entrepreneurship, I commend the Subcommittee for holding this important hearing and for its leadership in supporting America's entrepreneurs. These visionaries are the engine of the New Economy, and your support is critical to their continued prosperity and vitality.

Thank you.

- Erik R. Pages and the National Commission on Entrepreneurship have received no federal funds during the current and preceding two fiscal years.

NATIONAL COMMISSION ON ENTREPRENEURSHIP

Background Information

The National Commission on Entrepreneurship was recently established to provide local, state, and national leaders with a roadmap of how to sustain and expand a flourishing entrepreneurial economy. Entrepreneurship is the critical force behind innovation and new wealth creation -- the key drivers of our country's economic growth. Through research, publishing, conferences and other events, the Commission will promote an agenda that helps grow a successful entrepreneurial economy into the 21st Century.

Why Now?

At a time of unprecedented prosperity and heightened media attention on leading business visionaries, promotion of entrepreneurship may seem unnecessary. ***Yet, ironically, entrepreneurs are the most poorly represented business community in policymaking circles.*** Large companies maintain in-house government relations staffs. Medium-sized companies lobby extensively through their trade associations. The small business community – small businesses that provide traditional goods and services – is one of the nation's most powerful lobbying forces.

In contrast, entrepreneurs start innovative small businesses that they intend to grow into larger companies. Most FORTUNE 500 companies were started by a single entrepreneur or a small group of such visionaries. These firms are passing through a stage in business development and don't form the type of static political constituency recognized by policy makers. Entrepreneurs avoid policy makers, and policy makers do not reach out to entrepreneurs. As a result, our nation's political leaders need a reliable source to help them understand the most important economic engine in American society today.

Our Mission

We seek to bridge this gap. We will support the cultural, educational, commercial, and institutional changes required to continue the incredible growth and positive impact of entrepreneurs and their start-up enterprises. We will educate policymakers about the key barriers constraining entrepreneurs and recommend new public policies to protect and stimulate the creation and growth of an entrepreneurial economy and culture.

Our vision is to develop a public policy agenda that will help create local, regional, and national environments that support and contribute to the success of entrepreneurs – environments where individuals are encouraged to innovate and where start-up ventures, through supportive public policies and infrastructure, continue to grow and create new wealth for the economy. We will also strive to expand the benefits of entrepreneurship to regions of the country who have been "left out" of the enormous prosperity generated by these firms in the 1980s and 1990s.

For more information on the National Commission on Entrepreneurship, please contact Erik Pages 202.434.8061 or epages@sso.org.

444 N. Capitol Street, Suite 399 Washington, D.C. 20001 tel: 202-434-8060 fax: 202-434-8065 e-mail: pvb@sso.org

NATIONAL COMMISSION ON ENTREPRENEURSHIP

Erik R. Pages

Erik R. Pages serves as Policy Director for the National Commission on Entrepreneurship, a new organization designed to help sustain our successful entrepreneurial economy into the 21st century.

Before joining the Commission, he served as Vice President for Policy and Programs at Business Executives for National Security (BENS). In this position, he oversaw the organization's policy operations and research activities, and directed the operations of the BENS Tail-to-Tooth Commission, a blue ribbon panel of business leaders designed to introduce best business practices to the Pentagon.

Before assuming these duties, Dr. Pages served as the first Director of the Office of Economic Conversion Information (OECI) at the U.S. Department of Commerce's Economic Development Administration (EDA). Under his leadership, OECI received the Arthur D. Little Award for Excellence in Economic Development. From 1985 to 1988, he served as Legislative Director for Representative Gus Yatron (D-PA). Dr. Pages has also served as an official advisor to the White House Conference on Small Business.

He received his Ph.D. from Georgetown University, where he now serves as an Adjunct Professor. He is a graduate of Dickinson College (Phi Beta Kappa) and the University of Pittsburgh's Graduate School of Public and International Affairs. He has written and published widely on defense economics, economic development, technology policy, and national security policy. His publications include the book, *Responding to Defense Dependence* and the forthcoming volume, *The Revolution in Business Affairs: What Business Can Teach America's Military*. Dr. Pages was recently selected by the Rockefeller Foundation as one of 24 national "Next Generation Leaders."

444 N. Capitol Street, Suite 399 Washington, D.C. 20001 tel: 202-434-8060 fax: 202-434-8065 e-mail: pvb@sso.org

Pepper Horton, CPA **Tax Technology, LLC**
November 2, 1999 *Start-up Success Accounts (SUSA)*

My name is Francis H. ("Pepper") Horton, III and I am a Certified Public Accountant from Greenville, South Carolina. I am here today to provide this subcommittee with testimony regarding the *Start-up Success Account Act of 1999.*

Background

I have been in public practice for over 10 years. The first nine years were spent working for a large accounting firm where my clients were very often large companies. In 1998 I decided to start my own consulting practice so that I could focus on helping businesses that typically could not have afforded to engage a larger firm. In doing so, I found a great deal of satisfaction in working with new businesses and soon developed an understanding of how the tax law often works against their success.

Testimony

After reading this act and considering its implications, I have summarized my thoughts into the following points:

1. Double-Taxation – This bill would clearly be of great benefit to regular or "C" corporations in managing their cash flow. A corporation's net income is taxed at the corporate level and when these after-tax earnings are distributed to the shareholders, the earnings are taxed again as dividends. Double taxation creates an enormous incentive for business owners and their consultants to keep corporat taxable earnings low. As a result, business owners engage in tax motivated spending at or near year-end. If there is one thing I have learned in my career it is that tax motivated spending or investing is, at best, an inefficient use of resources and is often tantamount to throwing away a dollar to save forty cents. One of the most commonly used mechanisms for lowering corporate profits is increasing compensation to employee-shareholders. Of course the tax code mandates that an employee-shareholder's compensation is reasonable. However, reasonable is a subjective term and often produces a range of compensation amounts that could be considered reasonable. As a result, business owners have a huge incentive to accept the compensation amount that is on the high end of what could be considered reasonable instead of what the business actually needs. This bill would mitigate that motivation by allowing corporations to achieve the same tax effect as "comp'ing" out the corporation's profits while still keeping the cash inside the corporation for future use that may or may not be anticipated.
2. Funding Expansion – As a business grows, it must increase its inventory, secure new office or plant space, purchase new equipment, train new employees, etc. While Section 179 allows many businesses to expense their equipment purchases, all of the other expansion related expenditures must be capitalized for tax purposes. This can leave a new business in the unfortunate situation of having a tax liability with little cash on hand. At the end of year two, for example, a new business could place some of the cash on hand to fund year three's expansion into a SUSA account and immediately reduce the business' tax liability. Even if this cash is only temporary placed in a SUSA account, it provides the new business with a valuable tax deferral. Funds that would have ordinarily been remitted to the Treasury will be in the private sector creating jobs and funding economic expansion.
3. Smoothing-out Earnings – As you are aware, out tax brackets are graduated so that individuals and corporations with higher taxable income pay their tax at a higher marginal rate. One possible use of SUSA accounts would be in "smoothing-out" a business' earnings to avoid income spikes from temporarily thrusting the taxpayer into a higher tax bracket. While Generally Accepted Accounting Principles aim to match revenues and their related costs in the proper period, the tax code tends to accelerate income recognition and defer deductions in order to increase revenue. This and a host of other business

factors can lead to the bunching of income in a given tax year. This bill could provide taxpayers a tool to lessen the sting of abnormally high taxable income in a single year.

4. Self-Employment Tax Savings – Section (e)(3) of the bill provides that the amounts included in gross income under this section will not be included in determining net earnings from self-employment. This creates a planning opportunity to lessen the impact of the self-employment tax depending on how the business is classified for tax purposes. Sole proprietorships, single-member LLCs, and most partnerships' net earnings are subject to the self-employment tax. My experience has shown that the self-employment tax can have a potentially devastating effect on business owners if they are not properly advised. If my understanding of this bill is correct, this provision provides an exclusion for the amount deposited in a SUSA account from the self-employment tax.

5. Tax Deferral – The bill's most obvious benefit is that it provides a business with the opportunity to defer income taxes for up to ten years while earning a return of the funds. In doing so, however, the bill encourages businesses to retain their earnings rather than engaging in tax-motivated spending. However, I am concerned that as a business grows and its profits expand, that the income from the SUSA will be taxed at a higher marginal rate than the taxpayers would have paid when the deposit was made. Many advisors will be reluctant to advise a client to defer income to a year where the marginal rate may be significantly higher.

Conclusion:

In conclusion, I would like to express my sincere appreciation to Congressman DeMint and Congressman Baird for their efforts to assist small businesses. As a consultant to many small businesses and as an owner of a small business, I am impressed with their apparent understanding that small business are the backbone of our economy and will be the number one source of new jobs as we move into the next century. Obviously, I would love to see a bill that eliminated the double taxation that encourages debt financing and tax-motivated decision-making or a bill that simply lowered the tax rates that new businesses face. However, this bill is clearly an effort to assist small businesses in managing their tax liability and their overall cash flow. The unavoidable fact is that our tax code contains very few provisions aimed at helping small businesses get off the ground. H.R. 2373 is clearly a step in the right direction and I am, therefore, happy to support it.

Silicon Forest Electronics, Inc.

6204 East 18th Street
Vancouver, WA 98661
360-694-2000 • 888-496-8488
360-737-3181 fax
help@si-forest.com

November 1, 1999

The Honorable Brian Baird
United States Congressman
Washington, DC

Congressman Baird and others of the House Small Business Committee:

Thank you for the invitation to testify before the House Small Business Committee regarding the new legislation, H.R. 2373, the Start-Up Success Accounts Act of 1999. Silicon Forest Electronics, Inc. is a start-up in Vancouver, Washington and because we are still struggling for funds it is not possible to extract money from our budget to make the trip to Washington, DC. It is with great pleasure that I send this letter so that it may be read or used in the decision process of H.R. 2373.

Silicon Forest Electronics, Inc. is a manufacturer of electronic assemblies performing manufacturing services for Original Equipment Manufacturers (OEMs) on a contract basis. Our company has the greatest potential for success. We are lead by the fundamental principles of integrity, honesty and driven by a "Customer First" attitude. Our guidance in all of our decisions and direction is through the teachings of Jesus Christ. Through that we have created an attitude and dedication of service to our employees, of service to our customers and of service to the community. We are committed to meeting all of our customer's needs with rapid response, high quality products that exceed their expectations. These all seem to be novel approaches in today's marketplace. Today's marketplace is long on promises and short on execution.

My partner and I spent almost one full year in the planning and market study for this business. Each of us has an MBA, mine in marketing and my partner, Doug Williams, in Manufacturing. The product we produce is a service in an industry where growth is estimated to be between 25% and 30% per year. The market niche that we have selected is the least affected by overseas competition and bears minimal local competition. Most contract manufacturers are after the large, long run projects with loads of competition from within the US and even greater competition from abroad. Our business focuses on the short to medium runs that are technology based and tend to not be candidates for foreign competition. We have located a group of highly skilled workers with great dedication and loyalty. We expect to hire about 200 workers in the next five years. Our customers are highly supportive and want to keep increasing their dependence upon us.

With all of this going for us, you may ask, "What is the issue?" We have a much better starting position than do most typical start-ups. Much to our chagrin, we are undercapitalizes as are most start-ups. Even in this business element we have been highly successful; however, we are still short on capital needs. Our business plan calls for capitalization of $1,400,000 and a highly leveraged lease arrangement for our capital equipment. After much difficulty, we have all the leases in place but are still short of the capitalization requirements by $400,000. The capital needs are to fund the start-up costs and significant cash flow requirements to get to the break-even point.

We have tried the traditional sources of funds. The banks are only interested if you have collateral of a value that is greater than the amount you want to borrow, preferable in CDs. The local economic development sources of funds are not available to start-ups or are limited to the rural or economically depressed areas. The economic development agencies want businesses to move to the area and bring 200 jobs with them immediately and are not willing or able to invest and grow the jobs. We have tapped our own resources to the max. Everything we own is now mortgaged or used to secure the leases or part of our original capital investments. Our credit cards balances are climbing. Our friends and families have invested strongly in our business (currently we have 20 shareholders). We thank God for the support we have found in our church family. Current SEC rules limit how you can sell your shares and make it nearly impossible to raise significant amounts of start-up capital. Then there are the Venture Capitalists. They definitely want in. In return you give up control of the company and a major portion of the stock. It gives "Swimming with the Sharks" a new twist.

As you can see we are currently in the position to be most helped by this legislation. Having taxes that can be deferred would allow us to continue to create jobs and grow without relying on the more onerous methods of finance. Of special interest to us would be to use the accounts that would be set up under this legislation as collateral for highly competitive rates on commercial loans as opposed to the use of high interest debt instruments. These tools would be of great benefit to Silicon Forest Electronics, Inc. and other entrepreneurs in the future will reap the benefits. I strongly support this legislation.

Thank you for this opportunity to express our support for the actions that will benefit start-ups all over the country. Continued interest by our legislators in support of the small business process is necessary to stimulate economic growth and fuel our economy. Without investments of our country's resources into the small business, the country will stagnate and loose technological ground to the foreign nations. We must stay strong by continuing to invest in our economic future; for it is economic strength that will keep the US at the head of the pack.

Respectfully submitted,

Frank Nichols
President
Silicon Forest Electronics, Inc.

GLOBAL ENTREPRENEURSHIP MONITOR

1999 Executive Report

PAUL D. REYNOLDS Babson College

MICHAEL HAY London Business School

S. MICHAEL CAMP Kauffman Center for Entrepreneurial Leadership

Copyright © 1999, Paul D. Reynolds, Michael Hay and Kauffman Center for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation. All rights reserved.

TABLE OF CONTENTS

Page

List of Figures and Tables 1
Project Directors, Research Teams and Sponsors 2
Executive Summary 3

I. Entrepreneurship and Public Policy: An Overview 5

II. Why Entrepreneurship? 7

III. Understanding Entrepreneurship: The Global Entrepreneurship Monitor Model 9

IV. Levels of Entrepreneurial Activity 13

V. Entrepreneurship and Economic Activity 16

VI. What Makes a Country Entrepreneurial? 19
Entrepreneurial Opportunity 19
Entrepreneurial Capacity 21
Infrastructure 22
Demography 23
Education 26
Culture 29

VII. National Comparisons 32

VIII. Entrepreneurship and Public Policy: Ten Propositions 39

IX. Conclusion 43

End Notes

LIST OF FIGURES AND TABLES

Figures:

Figure 1: Conventional Model of National Economic Growth

Figure 2: Model of Entrepreneurial Processes Affecting National Economic Growth

Figure 3: Consolidated Model of Processes Affecting National Economic Growth

Figure 4: Global Entrepreneurship Monitor:
A Detailed Model of Entrepreneurial Processes and Economic Growth

Figure 5: National Prevalence of Start-Ups: All, Independent,
Firm-Sponsored and Growth

Figure 6: National Prevalence of Personal Investors

Figure 7: Level of Entrepreneurial Activity and Growth in GDP

Figure 8: Level of Entrepreneurial Activity and Employment

Figure 9: Level of Entrepreneurial Activity and Perception of Opportunity

Figure 10: Level of Entrepreneurial Activity and Entrepreneurial Capacity

Figure 11: Level of Entrepreneurial Activity and Infrastructure Suitability

Figure 12: Level of Entrepreneurial Activity and Demographic Factors

Figure 13: Level of Entrepreneurial Activity and Educational Emphasis

Figure 14: Level of Entrepreneurial Activity and Cultural Factors

Tables:

Table 1: Level of Entrepreneurial Activity: Three Groups

Table 2: Level of Entrepreneurial Activity and Economic Well Being

Table 3: Level of Entrepreneurial Activity and Age and Gender

Table 4: Level of Entrepreneurial Activity and Gender and Country

Table 5: Level of Entrepreneurial Activity and Percentage of Mid-Career Adults

Table 6: Level of Entrepreneurial Activity and National Educational Emphasis

Table 7: Level of Entrepreneurial Activity and Educational Attainment

PROJECT DIRECTORS, RESEARCH TEAMS AND SPONSORS

Unit	Location	Members	Financial Sponsorship
GEM Project Directors	Babson College	Bill Bygrave	Kauffman Center for Entrepreneurial Leadership
	Kauffman Center for Entrepreneurial Leadership	Michael Camp	
	London Business School	Michael Hay	
GEM Project Coordinator	Babson College and London Business School	Paul Reynolds	
GEM COORDINATION TEAM	Babson College	Bill Bygrave Paul Reynolds	
	London Business School	Erkko Autio Michael Hay Jonathan Levie Paul Reynolds	EU TMR (DG12) Foundation for Entrepreneurial Management
NATIONAL TEAMS			
Canada	York University	*Rein Peterson* Alessandro Cefis Alfred Chung Charles Conrad Walter Liu Dale Tingley Robert Wanless	Office of the Dean Schulich School of Business York University
Denmark	Southern Denmark Business School	*Jan Warhuus* Poul Rind Christensen	Danish Agency for Development of Industry and Trade
Finland	Helsinki University of Technology	*Erkko Autio* Pia Arenius	Finnish Ministry of Trade & Industry; Culminatum Oy
France	Ecole du Management Lyon	*Gilles Copin* Alain Fayolle Isabel Servais	
Germany	Universitat zu Koeln	*Rolf Sternberg* Claus Otten Christine Tamasy	Apax Partners & Co Beteiligungsberatung GmbH
Japan	Keio University	*Tsueno Yahagi* Takehiko Isobe	
Israel	Tel Aviv University	*Miri Lerner* Yosh Avahami	Small Business Authority of Israel, R.A.
Italy	Babson College	*Miria Minniti*	
United Kingdom	London Business School	*Michael Hay* Jonathan Levie	Apax Partners & Co. Ltd
United States	Babson College	*Andrew Zacharakis* Bill Bygrave Carl Hedberg Paul Reynolds	Kauffman Center for Entrepreneurial Leadership

Project leader in italics.

EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) was created in September 1997 as a joint research initiative by Babson College and London Business School. The central focus was to bring together the world's best scholars in entrepreneurship to study the complex relationship between entrepreneurship and economic growth. From the outset, the project was designed to be a long-term multinational enterprise. In order to obtain reliable, comparable data, GEM focused on the G7 countries (i.e., Canada, France, Germany, Italy, Japan, United Kingdom and United States). Three additional countries, Denmark, Finland and Israel, were added the first year because selected scholars in these countries had particular expertise relevant to the project.

The GEM research design included data from national secondary sources, adult population surveys and in-depth interviews with key informants in each participating country. In this first year more than 10,000 adults worldwide were surveyed and more than 300 interviews conducted with experts in entrepreneurship.

For the purpose of understanding the role of entrepreneurship in economic growth, entrepreneurship was defined as:

> *"Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business."*

Three fundamental questions were implicit in the overall aim of this project:

- *Does the level of entrepreneurial activity vary between countries, and, if so, to what extent?*
- *Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?*
- *What makes a country entrepreneurial?*

Based on first year results, the evidence is compelling . . .

- Efforts to initiate new firms in the winter of 1999 varies between countries from a low of one per 67 adults in Finland (1.4 percent) to a high of one in 12 in the United States (8.4 percent).
- The level of entrepreneurial activity is positively correlated with recent gains in GDP for the 10 countries in the study. Variation in rates of entrepreneurship may account for as much as one-third of the variation in economic growth.
- The 10 countries in the 1999 study can be placed in three different groups on the basis of their level of entrepreneurial activity: **High** (Canada, Israel, U.S.; average level of entrepreneurial activity is 6.9 percent); **Medium** (Italy, United Kingdom; average level of entrepreneurial activity is 3.4 percent); and **Low** (Denmark, Finland, France, Germany and Japan; average level of entrepreneurial activity is 1.8 percent).
- In the most active countries (i.e., U.S., Canada and Israel) entrepreneurial activity is an integral and accepted feature of economic and personal life. In the remaining GEM countries, however, entrepreneurship through enterprise creation remains a structural and cultural anomaly. In such countries it may take decades of sustained changes in many national, cultural, political and economic institutions if they are to join the "elite" of entrepreneurial economies.

GEM provides a robust framework within which national governments can evolve a set of effective policies for enhancing entrepreneurship. Ten propositions resulting from this year's study are highlighted below.

- **Proposition 1:** Promoting entrepreneurship and enhancing the entrepreneurial dynamic of a country should be an integral element of any government's commitment to improving economic well being.
- **Proposition 2:** Government policies and programs targeted specifically at the entrepreneurial sector will have a more significant, direct impact than programs simply aimed at improving the national business context.
- **Proposition 3:** To be effective, government programs designed to encourage and support entrepreneurial activity must be carefully coordinated and harmonized so as to avoid confusion and to enhance their utilization by those for whom such programs are designed.
- **Proposition 4:** Increasing entrepreneurial activity in any country will entail raising the participation level of those outside the most active age group of 25-44 years old.
- **Proposition 5:** For most GEM countries, the greatest and most rapid gain in firm start-ups will be achieved by increasing the participation of women in the entrepreneurial process.
- **Proposition 6:** Long-term, sustained enhancement of entrepreneurial activity requires a substantial commitment to and investment in education at the post-secondary level (i.e., college, university or graduate programs).
- **Proposition 7:** Developing the skills and capabilities required to start a business should be integrated into specific educational and vocational training programs at all educational levels.
- **Proposition 8:** Regardless of education level, emphasis should be placed on developing an individual's capacity to recognize and pursue new opportunities.
- **Proposition 9:** The capacity of a society to accommodate the higher levels of income disparity associated with entrepreneurial activity is a defining feature of a strong entrepreneurial culture.
- **Proposition 10:** Government and public policy officials and opinion leaders from all spheres have a key role to play in creating a culture that validates and promotes entrepreneurship throughout society.

The purpose of the following report is to provide a brief overview of the GEM initiative, to present key findings for all 10 countries and to provide support for the principal public policy implications. In addition to the *1999 Executive Report*, GEM has published a full *Research Report*, which provides a more detailed examination of the research design and in-depth findings, and an *Operations Manual*, which outlines the technical procedures for how the project is conducted. Individual country reports are also available from each of the GEM National Teams.

I. ENTREPRENEURSHIP AND PUBLIC POLICY: AN OVERVIEW

Entrepreneurship is now center stage in the public policy arena of most countries. The ascendance of entrepreneurship in the last decade is reflected in several major policy initiatives around the world. Consider the following illustrative examples:

- At the end of 1998 the United Kingdom government's white paper, *Our Competitive Future: Building the Knowledge Driven Economy*, focused on a series of initiatives designed to enhance entrepreneurship.[1]
- Germany has an increasing number of programs designed to provide financial support for new firms, to ease the process of start-up and to encourage the participation of women. In the past decade approximately 200 innovation centers have been established providing space and other resources to start-up companies.
- In 1995 the *Decennium of Entrepreneurship* was launched in Finland. Coordinated by the Finnish Ministry of Trade and Industry, the aim was to bring together under one umbrella a host of individual initiatives in three broad areas: creating an entrepreneurial society, promoting entrepreneurship as a source of employment and fostering the growth of new ventures.
- In Israel, partly in response to the challenge to assimilate an increasing number of immigrants, a range of small business measures have been enacted by the Technological Incubators Programmer. More than 500 businesses have been established in 26 incubators. The Small Business Authority of Israel was created in 1994 with a wide mandate encompassing training and the provision of advice centers and financial resources. In addition, there has been an explosive growth of venture capital in Israel, and more than 100 Israeli companies are now quoted on NASDAQ.
- In France, major initiatives are under way to promote the teaching of entrepreneurship in universities, particularly to engineering students. University-based incubators are being created, a national competition for new high-tech companies was launched, and the Foundation of the Academy of Entrepreneurship was established.

Around the world, interest in entrepreneurship extends beyond national governments. The subject has attracted attention from many multi-national organizations as well. Again, consider the following:

- In 1998 the Paris-based Organization for Economic Co-operation and Development (OECD) published a report, *Fostering Entrepreneurship: A Thematic Review*, with the explicit aim of understanding the state of entrepreneurship in all OECD countries and identifying which policies might be most successful in fostering it.[2]
- In 1998, the European Commission presented a report to the Council of Ministers, *Fostering Entrepreneurship: Priorities for the Future*. Among the proposals was a commitment to simplifying the start-up process for companies, improving access to financing and developing a "spirit of enterprise and risk taking." Underpinning this program was the conviction that, "Europe's place as an economic power depends on its future entrepreneurs and the competitiveness of its enterprises. They will be the motor of the market economy."

Turning to another domain — the creation of capital markets for entrepreneurial businesses — we see more indications of increasing interest. The launch of EASDAQ, a pan-European stock market, was modeled in large part on the success of NASDAQ, the stock market favored by technology companies in the U.S. A series of other new capital markets soon sprang forth in principal European countries; these include EURO.NM which is facilitating cooperation between some of the European markets such as the Neuer Markt and Le Nouveau Marche.

Other domains reflect a strong interest in entrepreneurship. The World Economic Forum, sponsor of the annual Davos Conference for the world's leading multinational businesses, has recently adopted "Entrepreneurship in the global public interest" as its motto and is currently extending its membership categories to include "Global Growth Companies."[3] Also, business schools throughout Europe, North America and Asia report an acute shortage of faculty capable of teaching entrepreneurship.

All such developments point to the fact that entrepreneurship is at the top of the public policy agenda in many countries around the world. The question is, "Why?"

II. WHY ENTREPRENEURSHIP?

For many countries, the answer to this question lies in the greatest example of national commitment to entrepreneurship and economic progress: the United States. In addition to thousands of state, local and private initiatives designed to encourage and support entrepreneurship, the U.S. government annually spends hundreds of millions on business support programs. Because of their relative success, many of these programs are viewed as models by other countries looking to increase their level of entrepreneurial activity. This is illustrated by the United Kingdom government's creation of a Small Business Services Agency in 1999 modeled on the U.S. Small Business Administration. But how significant are the entrepreneurial activities and the resulting economic gains in the U.S.? The data are startling:[4]

Level of Entrepreneurial Activity and Economic Progress

- Since 1980, Fortune 500 companies have lost more than five million jobs, but more than 34 million new jobs have been created.
- In 1996 small businesses created 1.6 million new jobs. Fifteen percent of the fastest-growing new firms (i.e., "gazelles") accounted for 94 percent of the net new job creation, and less than one-third of these gazelles are in high technology.
- Small businesses (i.e., those with fewer than 500 employees) employ 53 percent of the private workforce and account for 47 percent of sales and 51 percent of private sector Gross Domestic Product (GDP).
- Sixteen percent of all U.S. firms have been in existence for less than one year.

Looking more generally at the U.S. economy, a similarly healthy picture emerges:[5]

- U.S. GDP grew at an annualized rate of 4.5 percent in the first quarter of 1999, the ninth time in the last 10 quarters that the growth rate has been 3 percent or higher.
- Personal consumption expenditures rose at an annual rate of 6.7 percent in the first three months of 1999.
- The U.S. has enjoyed eight years of economic growth, the longest period of sustained growth this century.

From an outsider's perspective, the conjunction of intense entrepreneurial dynamism and rapid economic growth — coupled with low unemployment and low inflation — seemingly points to only one conclusion: entrepreneurship fuels economic growth, creating employment and prosperity. The buoyancy of the U.S. economy appears to be a function, at least in part, of the entrepreneurial vitality evident even to the most casual observer. The United Kingdom government's white paper, *Our Competitive Future: Building the Knowledge Driven Economy*, referred to earlier, having raised the question why entrepreneurship and innovation matter, provides the following succinct answer.[6]

> *"Entrepreneurship and innovation are central to the creative process in the economy and to promoting growth, increasing productivity and creating jobs. Entrepreneurs sense opportunities and take risks in the face of uncertainty to open new markets, design products and develop innovative processes."*

At one level, these impressionistic illustrations are somewhat superficial. Beyond them, however, is a much deeper and well-established stream of evidence in

support of the proposition that entrepreneurship does play a pivotal role in economic growth. In almost all advanced economies, new and small firms account for 99 percent of all firms. A recent study of European Union (EU) countries suggested that 83 percent of the annual change in gross national product is accounted for by the growth in sales revenue of smaller firms outstripping the growth of larger firms.[7] Where data is available, new and small firms are consistently found to be the major source of new jobs.[8]

Entrepreneurship is at the top of the public policy agenda because of the seemingly unambiguous relationship between the level of entrepreneurial activity within a country and that country's degree of economic prosperity. But therein lies the mystery. Despite the impressionistic and empirical evidence that entrepreneurship makes a difference to economic well-being, there is scant understanding of (a) how the process makes a difference, (b) how much of a difference it actually makes and (c) what specific factors enhance the level of entrepreneurial activity within a given country.

The purpose of the Global Entrepreneurship Monitor (GEM) is to unravel or at least shed light on this mystery. By understanding the entrepreneurial process and its impact on economic growth we should be better prepared to give clear policy guidance as to how governments can enhance the entrepreneurial process.

Before proceeding, however, we must first review what we know about the entrepreneurial process and how our understanding has evolved. Such a review ensures that we have identified the appropriate factors that both support and are supported by entrepreneurial processes. A conceptual framework is also necessary for guiding any future data collection, analysis and interpretation.

III. UNDERSTANDING ENTREPRENEURSHIP: THE GLOBAL ENTREPRENEURSHIP MONITOR MODEL

Understanding economic growth — how to measure it, how the growth process operates and what factors determine it — is at the heart of economics. To address this phenomenon, economists have developed a variety of approaches. They range from descriptive models, some of which focus on the stages of growth or development through which an economy evolves, to formal models, which emphasize factors that are either external to the economic system (e.g., technological sophistication) or internal (e.g., the level of savings).

These different approaches share certain common characteristics. First, they focus on large, established firms rather than smaller firms. Second, they assume that large firms constitute the real locomotive of economic growth. Third, they are preoccupied with the relationship between national conditions (e.g., legal institutions) and the impact that these have upon the performance of firms. The corollary at the policy level is a focus on creating the national economic conditions within which businesses can flourish. In some instances, policies are deliberately established to foster the development of key industries or "national champions" capable of competing on the world stage. This conventional view of the economic growth process and the important factors it includes is depicted in Figure 1.

Even a casual study of the model in Figure 1 prompts an immediate question: Where is entrepreneurship? The answer is that it is accorded a role as part of the secondary economy in the micro-, small- and medium-sized firm sector. These firms are considered to provide a supporting role as suppliers of goods and services to the established firms in the primary economic sector. This is essentially a subordinate role. As such, the model provides relatively little understanding of the specific contribution entrepreneurship makes to economic growth and little guidance on how to enhance the level of entrepreneurial activity.

The GEM initiative begins with the assumption that the role of entrepreneurship is critical to economic growth. The role of the entrepreneurship process in economic growth is presented in Figure 2.

Figure 1
Conventional Model of National Economic Growth

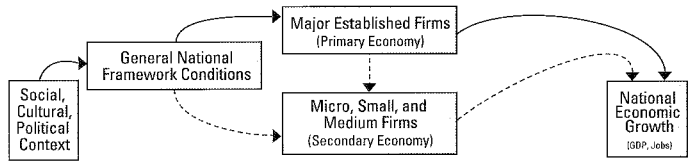
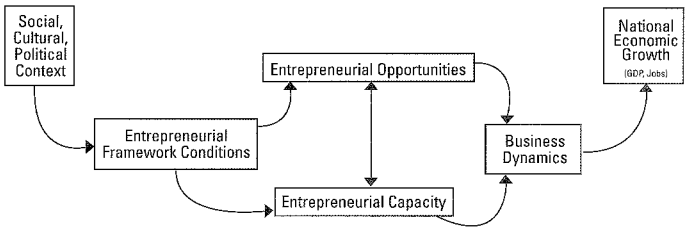


Figure 2
Model of Entrepreneurial Processes
Affecting National Economic Growth



The model in Figure 2 captures a number of things ignored in the conventional framework. First is the recognition that entrepreneurial activity is shaped by a distinct set of factors (referred to as *Entrepreneurial Framework Conditions*). Such factors include training in entrepreneurship and the availability of start-up financing. Next, the level of entrepreneurial activity is a function of the degree to which individuals recognize the entrepreneurial opportunities available and that they have the capacity — motivation and skills — to exploit them. Then, the interaction between perceived entrepreneurial opportunities and the entrepreneurial capacity to pursue them will give rise to a greater number of start-up efforts, new firm births and jobs. As more new firms and jobs are created, there subsequently may be greater firm deaths and job destruction. Firm and job turbulence or "churning" is what is often referred to as *Business Dynamics*, which usually accompanies economic growth. Lastly, economic growth is shown to be determined, in part, by the intensity of business dynamics.

We have, therefore, two perspectives. The first focuses on large established firms and the associated secondary role of smaller firms. The other focuses on the entrepreneurial sector itself, the conditions that shape it and its direct economic consequences. To properly understand economic growth both perspectives are needed. In fact, they are complementary. Economic growth reflects both sets of processes, although the mix or contribution made by each will vary between countries. To illustrate, both perspectives are combined in Figure 3.

Figure 3
Consolidated Model of Entrepreneurial Processes Affecting National Economic Growth

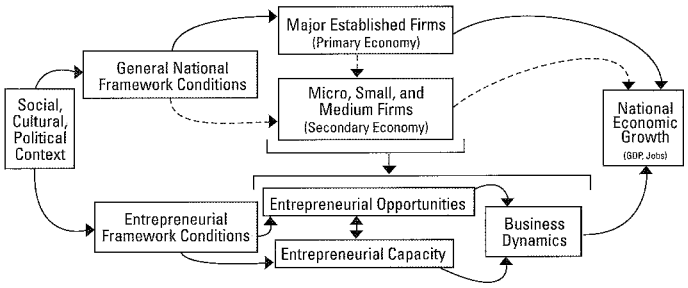
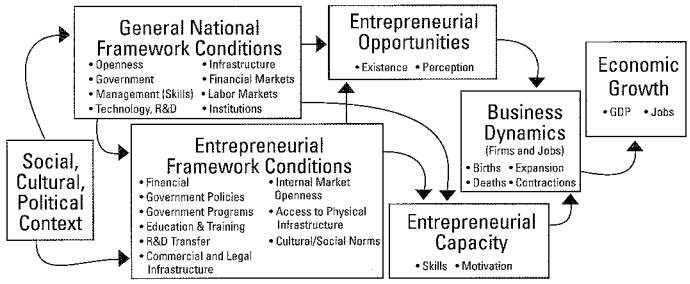


Figure 4
Global Entrepreneurship Monitor:
A Detailed Model of Entrepreneurial Processes and Economic Growth



Combining both perspectives has several advantages. First, it reflects the contributions of both large established and new entrepreneurial firms. Second, it makes clear that existing firms can be a significant source of start-ups. Third, it presents the context in which the entrepreneurial sector operates. Understanding the causal relationships in the model is an integral element of the GEM project. These causal relationships depicted in Figure 3 are both incomplete and presented in summary form. Therefore, the full GEM model is presented in Figure 4. This framework constitutes a more complete depiction of the entrepreneurial process than was included in lower half of Figure 3.

As noted, a central aim of GEM is to understand the relationship between entrepreneurship and economic growth. The GEM model sets out key elements of this relationship and the way in which the elements interact. Moving from left to right across the model shown in Figure 4, the key variables are best considered in terms of five major groups: 1) Social, Cultural and Political Context; 2) General National Framework Conditions and Entrepreneurial Framework Conditions; 3) Entrepreneurial Opportunities and Entrepreneurial Capacity; 4) Business Dynamics; and 5) National Economic Growth.[9]

Social, Cultural and Political Context: This group encompasses a range of factors that play an important role in shaping both the general framework conditions and the entrepreneurial framework conditions. Analyzing all of these is well beyond the scope of GEM, but certain key issues have been considered including demographic structure, investment in education, social norms and attitudes associated with independence and the perception of entrepreneurs.

General National and Entrepreneurial Framework Conditions: This group includes national contextual factors such as the role of government and financial institutions, levels of research and development (R&D), the quality of the physical infrastructure, labor market efficiency and the robustness of legal and social institutions. The group also includes entrepreneurial contextual variables such as the availability of financial resources for new firms, government policies and programs designed to support start-ups, education and training for entrepreneurship, effectiveness of technology transfer mechanisms and access to professional support services such as lawyers and accountants.

Entrepreneurial Opportunity and Capacity: Opportunity refers to both the existence and perception of market opportunities available for exploitation. Capacity refers to the motivation of individuals to start new firms and the extent to which individuals have the skills required to pursue entrepreneurial initiatives.

Business Dynamics: This group of variables includes measures of new firm starts and the growth, decline and death of existing firms.

National Economic Growth: This refers to a number of measures including GDP growth and the level of employment.

In testing the GEM model a wide variety of data were assembled.[10] The data can be summarized into three categories. First, standardized national data on a wide range of factors were assembled from a variety of sources (e.g., OECD, UNESCO, World Bank) supplemented, where necessary, by data provided by the national teams on their own country.[11] Second, adult population surveys were commissioned for each of the 10 countries and completed with at least 1,000 respondents in each country during February and March 1999. After a brief standardized interview schedule was adopted, translations were approved by each national team before the phone interviews were initiated.[12] Third, in nine of the GEM countries, all except Italy, the National Research Teams completed one-hour personal interviews with up to 40 experts (also called key informants) on the entrepreneurial sectors of their own country. During these interviews, each expert completed a brief questionnaire (70+ items) that involved standardized assessments, again translated into the appropriate languages, of important features of their country's entrepreneurial sector.

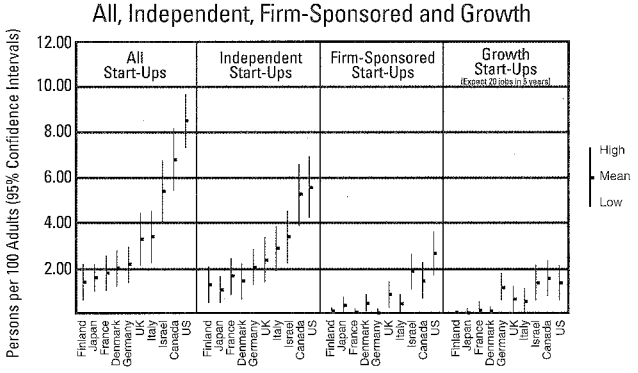
IV. LEVELS OF ENTREPRENEURIAL ACTIVITY

The first question GEM addresses is whether the level of entrepreneurial activity varies between countries, and, if so, by how much. The answer to both is "yes," and by quite a bit.

Among the better measures of the level of national entrepreneurial activity are estimates of active participation in new business creation. The population surveys in the 10 countries are used as the basis for the current measure. A representative sample of 1,000 adults was asked a series of questions about their participation in entrepreneurial activities, including whether or not they were currently starting a firm on their own or for their employer as part of their job. Those who responded yes to either or both questions were considered "nascent entrepreneurs" if they also were expecting to own part of the new firm and the initiative was not an operating business at the time of the interview. A follow-up question was asked about anticipated employment levels five years after the firm was expected to become an operating entity. Those initiatives that expected 20 or more employees were considered "growth start-ups." All 1,000 respondents were also asked if they had, in the past three years, invested personal funds in someone else's start-up business.

The results are presented for the 10 countries in Figure 5. Four types of comparisons are provided, and within each type the countries are rank ordered in terms of overall start-up rates. Reading from left to right, the four measures of start-up activity are: all start-ups, independent start-up efforts, business firm sponsored start-ups and growth start-ups. The vertical bars around the average value represent the 95 percent confidence interval, a measure of the precision of the estimates. In this case, if the same survey procedure was replicated 20 times, the average value would be expected to be in the range represented by the vertical bar on 19 surveys.[13]

Figure 5
National Prevalence of Start-Ups:
All, Independent, Firm-Sponsored and Growth

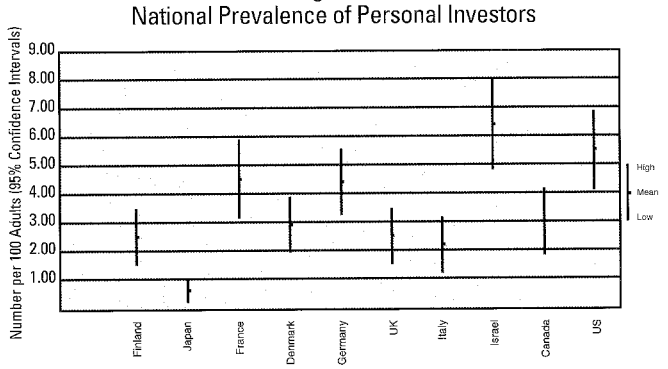


The differences in participation in new firm start-ups are enormous, from more than 8 percent of the adult population — one in every 12 persons in the U.S. to less than one in every 67 persons in Finland. This is more than a five-fold difference. In the highly active countries (i.e., U.S., Canada and Israel), it is rare to find a person who doesn't personally know someone who is trying to start a business. In the less active countries (i.e., Finland and Japan), it may be rare to find a person who knows of anyone trying to start a new firm.

It is useful to separate those working on independent start-ups from those sponsored by an existing business. Approximately one in four start-up efforts (or 0.7 per 100) for the 10 countries is a business-sponsored effort, while the other three (or 2.9 per 100) are independent efforts. About one in six may be considered a growth start-up, with prevalence rates ranging from one per 100 adults in the U.S. and Canada to virtually none in Japan and Finland. National patterns on these different types of start-ups correlate highly with the overall start-up rate. Autonomous start-up rates correlate 0.99 with all start-ups rates. Firm-sponsored start-up rates correlate 0.96, and growth start-up rates correlate 0.87 (all correlations are statistically significant). Hence, the higher the rate of start-ups, the higher the level of activity in all types of start-up efforts: independent, business-sponsored and growth-oriented.

Differences in personal financial support of new firms are also considerable for the 10 GEM countries, from less than 1 percent (Japan) to more than 6 percent (Israel) of all adults interviewed (see Figure 6.) However, these rates have only a moderate correlation[14] with the level of start-up activity. This personal form of financial support may, therefore, reflect both the level of entrepreneurial activity and the cultural norms reflecting expectations of support in family networks within different countries. And, these cultural norms may vary across countries.

Figure 6
National Prevalence of Personal Investors



The results presented in Figure 5 suggest that the countries may be considered in terms of three distinctive levels of entrepreneurial activity: ***high*** (U.S., Canada and Israel); ***medium*** (Italy and United Kingdom); and ***low*** (Denmark, Finland, France, Germany and Japan). These three groups are presented in Table 1. The average level of start-ups in the high group is twice that of the intermediate group; the level of start-ups in the intermediate group is twice that of the low group. The differences in average start-up rates between these groups are statistically significant. Thus, it is appropriate to use this classification scheme as the basis for further cross-national comparisons of entrepreneurial activity. Differences in the rates of personal investment shown in Table 1 are not statistically significant.

Table 1
Level of Entrepreneurial Activity: Three Groups

Level of Entrepreneurial Activity	Countries	Average Business Start-Up Rate (#/100 persons)	Average Personal Investment Rate (#/100 persons)
High	United States Canada Israel	6.9	5.0
Medium	Italy United Kingdom	3.4	2.4
Low	Denmark Finland France Germany Japan	1.8	3.1
(Statistical Significance)		(0.0002)	(0.1326)

V. ENTREPRENEURSHIP AND ECONOMIC ACTIVITY

The second question GEM addressed was whether the level of entrepreneurship has an impact on national economic growth. The early results point to a strongly suggestive relationship between the level of entrepreneurial activity in a country and its economic growth or prosperity. The tentative phrasing here is quite deliberate for reasons that will be explored later. For now, let us review the evidence.

When examining this relationship, two measures of economic prosperity were used.[15] The first measure was the change in GDP, perhaps the most widely used measure of national economic growth. The second measure was the level of *employment* within a country; this measures the percentage of people who want to work who have jobs. The employment level, or the percentage of the labor force with jobs, was arrived at by simply subtracting the unemployment rate from 100 percent. The relationship between new and small firm growth and job creation was emphasized in earlier studies by David Birch and others,[16] and has the advantage of being simpler to measure and compare across countries than measures that rely on currency or other measures of value. The complexity of modern economies is reflected in the rather low level of agreement between these two measures of economic well being. There is also no systematic relationship for the GEM countries. The relationship between the three levels of entrepreneurial activity and these two measures of economic growth are presented in Table 2.

Table 2
Level of Entrepreneurial Activity and Economic Well Being

Level of Entrepreneurial Activity	Countries	Average Business Start-Up Rate (#/100 persons)	Average 1998 Quarterly Growth in GDP	Employment Rate: Jan 1999
High	United States Canada Israel	6.9	1.17%	92.8%
Medium	Italy United Kingdom	3.4	.25%	90.8%
Low	Denmark Finland France Germany Japan	1.8	.41%	91.8%
(Statistical Significance)		(0.0002)	(0.186)	(0.78)
			Without Finland	Without Japan
High			1.17%	92.8%
Medium			0.25%	90.8%
Low			0.26%	90.8%
(Statistical Significance)			(0.13)	(0.64)

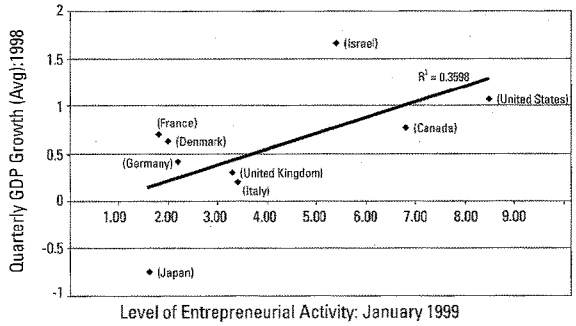
Although not statistically significant, there is clearly a systematic pattern in Table 2. The three countries with the highest levels of entrepreneurial activity have higher average growth in GDP and higher levels of employment. The lack of statistical significance is largely due to the small number of cases and the unusual patterns found between the countries with intermediate and low levels of entrepreneurial activity. This, in turn, is due to some rather special circumstances in some countries. In particular, one firm in Finland, Nokia, is responsible for 25-35 percent of all economic growth in that country.[17] Clearly, this is an unusual circumstance not found in other advanced market economies. Second, unemployment figures for Japan are very unusual. The Japanese unemployment rate is at the highest level in several decades and is just now exceeding that of the U.S., which is at the lowest level in several decades. Thus, whatever is represented by the Japanese unemployment figures is not comparable to that of other advanced countries.

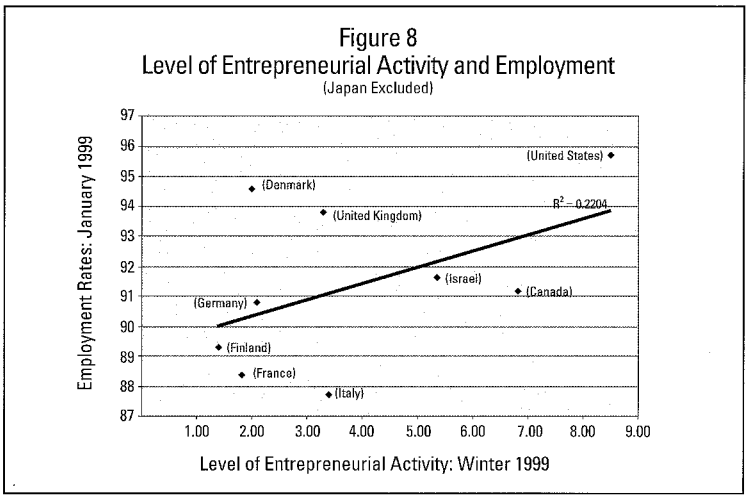
Comparisons based on the national level of entrepreneurial activity are, thus, presented in the bottom of Table 2 without Finland for economic growth and without Japan for employment. While still not statistically significant, the results have a pattern replicated frequently in the following analysis. There is a distinctive difference between countries with a high level of entrepreneurial activity and the other two groups; there is little or no difference between countries with an intermediate or low level of entrepreneurial activity.

Since the relationship between levels of entrepreneurial activity and national economic well being is an important issue, an alternative treatment is justified.

Scattergrams and the best-fit linear regression lines are presented for start-up rates and average recent growth in GDP (i.e., average for all quarters in 1998) in Figure 7 and the January 1999 employment rate in Figure 8. For the reasons mentioned above, Finland is excluded from the analysis in Figure 7 and Japan is excluded from the analysis in Figure 8.

Figure 7
Level of Entrepreneurial Activity and Growth in GDP
(Finland Excluded)





The primary measure of association, the correlation, is 0.61 for the relationship between start-up rates and economic growth and is marginally significant (p=0.08). The correlation between start-up rates and January 1999 employment is 0.46 but is not statistically significant. Given the many factors that affect economic growth and employment and the small number of cases in this analysis, these results are very encouraging. Assuming that start-up rates are stable over time and have an effect on economic growth, this level of association would suggest that about one-third (36 percent) of the variation in economic growth was due to variation in firm start-up rates.

These patterns support the following conclusions:

- There is a relationship between the level of entrepreneurial activity and economic growth.
- None of the countries in this sample had a high level of start-ups and low level of economic growth.
- Variations in the level of entrepreneurial activity may account for one-third of the variation in national economic growth.
- Confirmation of these patterns will require more countries and longitudinal data so that the level of entrepreneurial activity can be measured prior to measures of economic well being.

VI. WHAT MAKES A COUNTRY ENTREPRENEURIAL?

Determining what makes a country entrepreneurial, the third question of the GEM initiative, is particularly difficult. Whereas one can readily establish a quantifiable measure of the level of entrepreneurial activity across countries and assess its relationship to economic prosperity, determining what makes a country entrepreneurial calls for a deep understanding of the country itself coupled with a range of qualitative assessments. In many respects these assessments are intrinsically subjective. Moreover, any attempt to answer the question has to take into account a large number of factors.

It is essential therefore that in trying to assess what makes a country entrepreneurial extreme care is taken, particularly when talking about the 10 GEM countries as a whole. It would be easy to overlook differences between countries, thereby obscuring the distinctive factors and features associated with each. The GEM results will, therefore, be presented in two parts. First, an overall assessment for all 10 countries will be provided in this section. The next section will provide an in-depth look at many of the qualitative features that distinguish each country.

To provide the most useful framework within which public policy debate can take place, the factors making up the GEM model have been distilled into those that are most important in explaining what makes a country entrepreneurial. Inter-country differences notwithstanding, it is possible to identify six key factors that vary in terms of their causal proximity to start-up rates. The two that are closest are:

Factor 1: Entrepreneurial Opportunity

Factor 2: Entrepreneurial Capacity

These two factors, in turn, will be affected by the following factors:

Factor 3: Infrastructure

Factor 4: Demography

Factor 5: Education

Factor 6: Culture

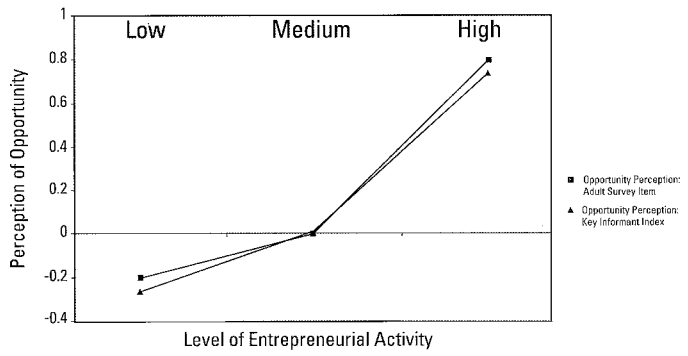
These last four are not listed in rank order and all have a significant association with the start-up rate. Taken together, these six factors capture what matters most in accounting for differences in entrepreneurial activity between countries. There is considerable overlap among these dimensions, but until a larger number of countries is studied over a longer period of time, it is not possible to determine the independent influence of each factor. A discussion of the nature and extent of the influence of each factor will now be presented.

Factor 1: Entrepreneurial Opportunity

Entrepreneurship is anchored in opportunity. Any entrepreneurial initiative springs from a sense that a genuine market opportunity exists for the product or service that a new firm may provide. Market opportunity is, in a fundamental sense, the wellspring of entrepreneurship. Understanding the level of entrepreneurial activity within a country entails understanding the extent to which the people who actually start businesses perceive opportunity.

This was measured directly in the 10 country survey of the adult population, where each person was asked, "Do you think that in the next six months good opportunities will have developed for starting a new business in your country?" It was measured indirectly by asking the key informants a series of questions about the existence of entrepreneurial opportunities within their country with five items, such as "In my country, one sees more good opportunities than people able to take advantage of them"

Figure 9
Level of Entrepreneurial Activity and Perception of Opportunity



and "In my country, opportunities to create a truly high-growth firm are rare." Responses, provided on a five-point scale, were combined to create an "index of perceived opportunity." The patterns found when the three levels of entrepreneurial activity were compared are presented in Figure 9.

In this, as in other comparisons in this section, the different measures are derived from different procedures. In order to provide a standardized comparison, each index has been transformed so that the value for the intermediate countries (Italy and United Kingdom) is zero and that the value for the high level (Canada, Israel and United States) and low level (Denmark, Finland, France, Germany and Japan) are as a proportion of the difference between the highest and lowest value. This allows comparisons of the relative differences as well as patterns related to the level of entrepreneurial activity.

Differences between the high, intermediate and low entrepreneurial groups could be depicted in several patterns. Differences may be reflected in a straight line through the three points, suggesting that a gradual change in the index was associated with a gradual change in the level of entrepreneurial activity. Another pattern might be a reversed "L" shape, suggesting a major difference between the high and intermediate group, but a very small or no difference between the intermediate and the low group. The reversed "L" pattern would imply that a major change in the factor is required to make a shift from the intermediate to the high activity group.

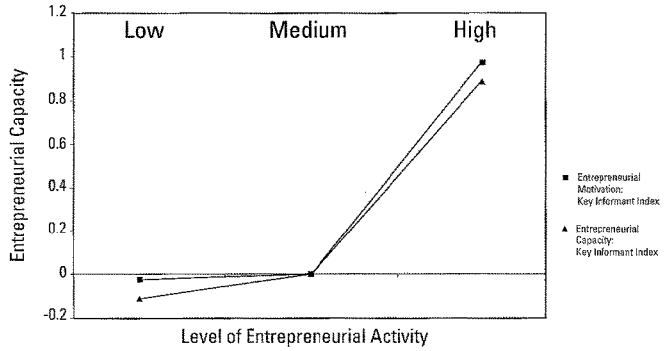
The pattern in Figure 9, and in many of the following presentations, suggests that small changes in the factor may contribute to a country's shift from the low to the intermediate level of entrepreneurial activity, but that a major change is required to move to the highest level. This pattern is repeated in several of the following analyses. There is no question that the level of perceived opportunity for entrepreneurial initiatives is dramatically higher in the most active countries. The perceived richness or paucity of opportunity is a key determinant of the level of entrepreneurial activity.

Factor 2: Entrepreneurial Capacity

As noted, entrepreneurship is anchored in the recognition within a population that genuine new business opportunities exist. However, while opportunity is a necessary condition of entrepreneurship, it is not sufficient. For an entrepreneurial initiative to occur one must possess the capacity (i.e., the motivation and skill) to take advantage of the opportunity by starting a new firm. Entrepreneurship is the point at which entrepreneurial opportunity and entrepreneurial capacity meet. It is quite possible to imagine a situation rich in opportunity but impoverished in terms of entrepreneurial activity simply because few individuals have the motivation or capability to do anything about the opportunity. The flood of West German entrepreneurs into East Germany immediately after the wall came down was a vivid response to such an imbalance.

Two measures of this factor were developed from the key informant interviews. The first was a five-item index related to judgements about the capacity of people to start new firms. Examples include "In my country, many people have experience in starting new businesses" and "In my country, many people can react quickly to good opportunities for a new business." A second five-item index measured judgements about the motivation of individuals in the country to become involved in entrepreneurial endeavors. Examples of these items included "In my country, most people consider becoming an entrepreneur a desirable career choice" and "In my country, you will often see stories in the pubic media about successful entrepreneurs." The results, adjusted as described above, are presented in Figure 10.

Figure 10
Level of Entrepreneurial Activity and Entrepreneurial Capacity



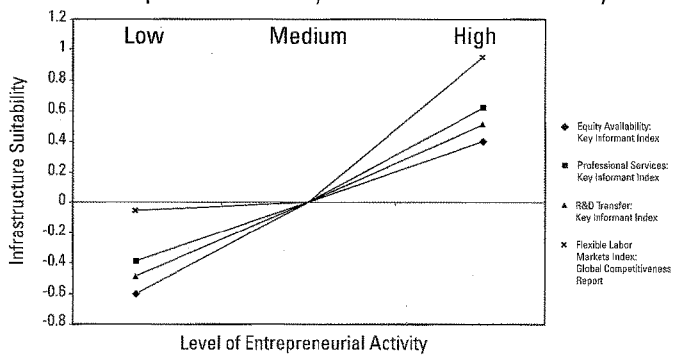
Again, the same pattern found with entrepreneurial opportunity is present with entrepreneurial capacity. The difference between the high and intermediate levels is dramatic. The difference between the intermediate and low level of activity groups is very modest, but in the expected direction. These results suggest that in countries where the potential and motivation to start a new business are quite weak, that the level of start-ups will be quite low regardless of the public's perception of the availability of good opportunities.

Factor 3: Infrastructure

Few features have received as much attention regarding entrepreneurial capacity as the infrastructure, broadly defined to include the availability of financing, land, facilities, employees, suppliers, government assistance, utility costs, good transportation, tax concessions, subsidized loans and any other item or component or factor required in producing goods or services. A substantial part of the analysis and a major feature of the interviews with the key informants focused on the extent and suitability of the infrastructure.

Four aspects of the infrastructure appear to have a systematic relationship to national variations in entrepreneurial activity. Three were indices developed from the questionnaires completed by the key informants. These included three multi-item indices based on the key informant interviews. One reflected the availability of equity financing, with items such as "In my country, private individuals (other than founders) have provided major financial support for new and growing firms." A second multi-item index reflected the availability and costs of suitable professional services, with items such as "In my country, it is easy for new and growing firms to get good, professional legal and accounting services." The third multi-item index reflected the potential for R&D transfer within the country with items like "In my country, new and growing firms have just as much access to new research and technology as large, established firms." A fourth feature was taken from the Global Competitiveness Report 1997, a multi-item index related to the flexibility of the internal labor markets.[18] The relative

Figure 11
Level of Entrepreneurial Activity and Infrastructure Suitability



difference among the three groups of countries on these four items is presented in Figure 11.

The pattern in Figure 11 is somewhat different from that in previous figures. In this case, the difference between the high and intermediate countries is about the same as that between the intermediate and low countries. Labor market flexibility, however, reflects the same step function as with the previous factors, with a small difference between the intermediate and low group of countries. This would suggest that infrastructure may have a continuous and gradual influence. A modest improvement in infrastructure may result in a modest improvement in national entrepreneurial activity.

A wide range of other infrastructure factors, however, did **not** have any significant impact on the level of activity. These include the availability of debt or loan subsidies; good legal, accounting and banking services; access to the physical infrastructure; government policies and procurement orientations; complications with government regulations, taxes and licensing procedures; internal market openness; and judgements about the helpfulness of government programs (considered to be of little value in all countries).

Perhaps most dramatic on this list of infrastructure features which make **no** difference were those related to government policies, suggesting that proactive government policies, which may seem significant compared to other government efforts, are unable to provide the massive changes required to enhance a nation's level of entrepreneurial activity. Evidence from other research, however, suggests that government programs are generally helpful for individual start-ups or existing firms. This would imply that the scope of most government initiatives may be too small to have a significant influence on an entire economy.[19]

Factor 4: Demography

People start firms, obviously. But what is less obvious is which people. Those engaged in starting a business represent a small minority of the population — 8.4 percent in the U.S., 1.4 percent in Finland. This minority is in turn drawn from select parts of the population. One of the purposes of GEM is to understand the link between the demographic make-up of a country and the achieved level of entrepreneurial activity. As it turns out, this link exhibits a very strong causal relationship. Several demographic dimensions emerge as being critical: the age structure of a population, the level of participation by women in the entrepreneurial process, and anticipated population growth.

Table 3
Level of Entrepreneurial Activity and Age and Gender

(Number per 100)	Men	Women	Both Genders
18-24 Years old	4.8	3.7	4.3
25-34 Years old	8.3	3.2	5.7
35-44 Years old	6.0	3.0	4.4
45-54 Years old	6.2	2.5	4.3
55-64 Years old	2.4	1.1	1.7
65 and older	1.0	0.1	0.5
All ages: 18 and older	5.0	2.2	3.6

A. Age, Gender and Start-Ups

Numerous studies have found that participation in start-ups is dramatically affected by the age and gender of potential nascent entrepreneurs. This is illustrated in Table 3 (previous page) which shows the proportion of men and women of different ages who are associated with start-ups based on the full adult sample from all 10 countries. Two patterns are clear: men are much more active in start-ups than women and the levels of activity are highest for those 25-34 years old.

The gender difference varies by country. Taking only those 25-44 years old for comparison, the start-up participation rates for men and women are presented in Table 4 for each country. It is clear that a major reason for the low start-up rates among some countries is the lack of participation by women. Women participate at 58 percent of the rate for men in the high-participation countries but this declines to 31 percent in the low-participation countries. Countries that wish to increase the level of start-up efforts may make major gains by helping women to become more involved.

B. Population Age Structure

If those who initiate start-ups are most likely to be between 25 and 44 years old, will countries with more individuals in this age range have more start-ups? The answer is "yes." The correlations between the percentage of men and women of different ages in the work force, defined as those 18-64 years old,[20] and the start-up rates are presented the right hand column of Table 5.

Table 4
Level of Entrepreneurial Activity and Gender and Country

Entrepreneurial Emphasis	Country	Men	Women	Women/Men Ratio
High	United States	12.5	7.6	61 %
	Canada	13.5	6.8	50 %
	Israel	7.7	4.9	64 %
(Average for High Level)		(11.2)	(6.2)	(58%)
Medium	Italy	8.6	2.6	30 %
	United Kingdom	6.5	2.7	41 %
(Average for Medium Level)		(7.6)	(2.6)	(35%)
Low	Germany	7.0	1.2	17 %
	Denmark	5.8	0.6	10 %
	France	3.5	1.7	49 %
	Japan	3.2	1.2	38 %
	Finland	3.0	0.9	30 %
(Average for Low Level)		(4.5)	(1.1)	(31%)

Table 5
Level of Entrepreneurial Activity and Percentage of Mid-Career Adults

All those 20-64 years old	Ten country average %	Minimum %	Minimum %	Correlation with business start-up rates
Percentage men 25-34 years old	25.3	22.3	28.3	0.38
Percentage men 35-44 years old	24.7	20.0	28.3	0.74*
Percentage women 25-34 years old	24.6	21.8	26.9	0.39
Percentage women 35-44 years old	24.6	21.8	26.9	0.39
* Statistically significant.				

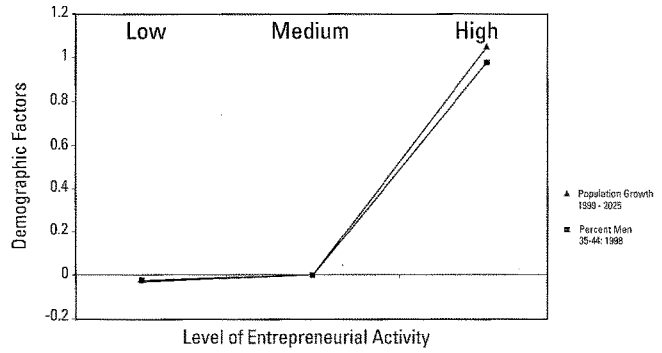
The correlation of 0.74 for men 35-44 years old (which is statistically significant), suggests that the presence of early career individuals in the population is an important determinant of the level business start-ups. There is no ambiguity about the causal relationship. Countries with a low proportion of early career men, such as Japan, may need to adjust efforts to encourage start-ups from other age groups.

C. Population Growth: 1999-2025

Increases in the demand for goods and services is a major source of new entrepreneurial opportunities. The expectation of future opportunities may affect the participation in new firm start-ups. There is substantial variation among the 10 countries in this analysis in expected population growth from 1999 to 2025, from a decline of 11 percent for Italy to an increase of 35 percent for Israel.[21] As it turns out, this has a very high measure of association with firm start-up rates measured early in 1999.

The association between these two demographic factors and the national level of entrepreneurial activity is presented in Figure 12. As with several of the earlier presentations, this allows for a standardized comparison of the relative effects of the participation of women in start-ups, the proportion of early career men in the population and the expected population growth over the next 25 years. In all cases the high participation countries are different than the intermediate participation countries; the difference between the intermediate and low activity countries is very small.

Figure 12
Level of Entrepreneurial Activity and Demographic Factors



In terms of national policy, these factors pose the greatest challenge. It is very difficult to affect either the age structure of the population or future population growth. A shortage of those most likely to pursue entrepreneurship under normal circumstances, early career men, suggests that government policies may need to encourage other groups, such as women, to pursue entrepreneurial options. How easy it will be to change the expectations associated with women's work careers remains to be determined.

The anticipation of no or negative population growth is a major complication. Those living in countries with stagnant populations are quite aware of these trends and may find it difficult to pursue entrepreneurial career options in traditional, stable sectors or stagnant geographic regions. They may need assistance to find the opportunities in growing economic sectors or geographical regions with economic growth potential.

Factor 5: Education

Entrepreneurship flourishes when opportunity meets an individual with the motivation and skills needed to turn the perceived opportunity into a business reality. Opportunity *per se* is worthless without individual commitment and the capability to take advantage of it. Since part of entrepreneurial capacity is the set of skills needed to exploit an opportunity, the question immediately arises as to the impact that education has upon entrepreneurship.

Developing new products and services or creating new ventures calls for some degree of training and education. Certain very sophisticated products entail a great deal of training to produce, market and use. It is reasonable to expect that the better educated the population the higher the level of entrepreneurial activity. Does the evidence support this intuitive line of reasoning?

Here an immediate difficulty arises, namely providing standardized measures of educational activity across countries with very different education systems. Without such measures there is no chance of making valid comparisons. One solution has been offered by the World Bank. The Bank examined the depth of participation in education programs across countries. First, a distinction was made between three levels of education: primary (pre-high school), secondary (or high school) and tertiary (or post-high school). A measure is then taken of the proportion of the total eligible population participating in programs at each of these levels. In other words, what percentage of those eligible in tertiary programs are actually enrolled at this level? If those older than the eligible ages participate, these indicators could exceed 100 percent.

The results for the 10 GEM countries are presented in Table 6 at two points in time, 1980 and 1995.[22] In this table the countries are presented in rank order by new firm start-up rate, as calculated by GEM. The relationship between start-up rates is presented in the correlation measure in the bottom row of Table 6.

Table 6
Level of Entrepreneurial Activity and National Educational Emphasis

Country	Start-up Rate: 1999	Primary Enrollment as a % of Eligible Age Group: 1980	Secondary Enrollment as a % of Eligible Age Group: 1980	Tertiary Enrollment as a % of Eligible Age Group: 1980	Primary Enrollment as a % of Eligible Age Group: 1995	Secondary Enrollment as a % of Eligible Age Group: 1995	Teritary Enrollment as a % of Eligible Age Group: 1995
United States	8.4	99 %	91 %	56 %	102 %	97 %	81 %
Canada	6.8	99 %	88 %	57 %	102 %	106 %	103 %
Israel	5.4	95 %	73 %	29 %	99 %	89 %	41 %
Germany	4.1	—	98 %	34 %	102 %	103 %	43 %
Italy	3.4	100 %	72 %	27 %	98 %	74 %	41 %
United Kingdom	3.3	103 %	83 %	19 %	115 %	134 %	48 %
Denmark	2.0	96 %	105 %	28 %	99 %	118 %	45 %
France	1.8	111 %	85 %	25 %	106 %	111 %	50 %
Japan	1.6	101 %	93 %	31 %	102 %	99 %	40 %
Finland	1.4	96 %	100 %	32 %	100 %	116 %	67 %
Correlation with start-up rate: 1999		-.25	-.26	0.78	-.07	-.31	0.61

This exhibit tells an interesting story. From the columns for primary and secondary enrollments, in both 1980 and 1995, it is evident that there is little or no relationship between the proportion of the eligible population enrolled at each level and the new firm start-up rate in any country. This is entirely to be expected. With enrollment levels of more than 95 percent in all 10 GEM countries there is barely any variation between countries. The picture emerging from the tertiary level data is, however, quite different.

Looking for example at the 1980 data, there is a positive correlation of .78 with business start-ups; the figure for 1995 is slightly lower at .61. This relationship, which is statistically significant for 1980, is highly suggestive. Simply put, it implies that the greater a country's investment in education at the tertiary level, the higher the rate of new firm formation. An obvious inference from this would be that graduates are more heavily engaged in starting new firms than those without graduate level training.

Somewhat paradoxically, however, the results presented in Table 7 suggest otherwise. All the research that has been done on people who start firms indicates that there is only a modest relationship with educational attainment beyond the level of completed secondary education. This is confirmed in Table 7. This table presents the relationship between level of education and participation for eight of the 10 countries in the adult population surveys. No educational attainment information was available from surveys in the United Kingdom and France.

Table 7 clearly shows that those that have not completed basic primary education (the North American equivalent of a high school degree) are unlikely to participate in a start-up. On the other hand, those with college/university degrees or a graduate

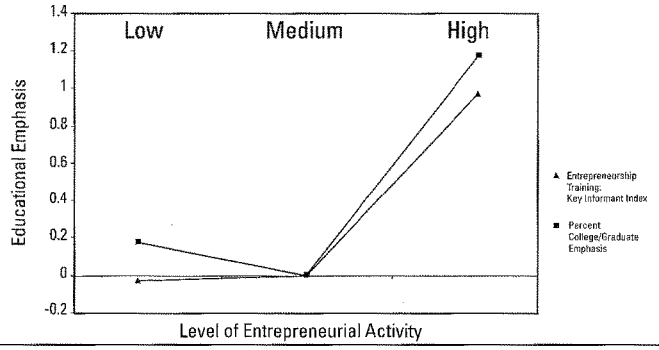
Table 7
Level of Entrepreneurial Activity and Educational Attainment

	Participation in Firm Start-Ups (n=7986)	Percentage of All Start-Up Efforts (n=306)
Not Completing High School	1.8 %	10 %
High School Degree	3.6 %	38 %
Post-High School, No College Degree	5.0 %	27 %
College Or University Degree Or More	5.0 %	25 %
All Respondents/Total	3.8 %	100 %

experience are no more likely to pursue start-ups than those with any other type of post-high school training. The right-hand column of Table 7 makes clear the consequence for start-up efforts; three in four start-ups are initiated by those without college/university degrees.

The relative impact of educational emphasis on the level of business start-ups for the three groups of countries is presented in Figure 13. Two measures are presented. The first measure is the rating of the key informants in each country on the suitability of the national educational programs, both general and those specific to entrepreneurship. This measure was derived from a five-item index completed at the end of the key informant interviews. A typical item was "In my country, the quality of teaching in primary and secondary education provides adequate instruction in market economic principles." The second measure was the relative national emphasis on college, university or graduate education. As before, there is a major difference between the countries with a high and intermediate level of entrepreneurship; there is no difference of consequence between those countries with an intermediate and low level of entrepreneurial activity.

Figure 13
Level of Entrepreneurial Activity and Educational Emphasis



The patterns in Figure 13 make it clear that a move to a high level of entrepreneurial activity requires a substantial investment in education. First, all citizens should be encouraged or have the opportunity to complete a basic education. This would remove one of the major personal barriers to pursuing firm start-ups among the population.

Certainly as important, if not more so, is an emphasis on investment in higher education. The greater this societal investment, the more likely it is that a country will have a strong entrepreneurial dynamic. However, as with many aspects of GEM, much more work is needed to understand the causal relationships. Some preliminary interpretations can be offered:

- First, education equips individuals with the capacity to think for themselves; it fosters an independent sense of identity and enhances awareness of alternative career choices. The sense of autonomy and independence, combined with greater self-confidence needed to start a business, is a positive outcome of education. Of course this is not true for all, but it makes a difference to a significant number and encourages acceptance of autonomy as a cultural value.
- Second, education broadens horizons and, by doing so, better positions individuals to perceive opportunities. The capacity to observe an opportunity, to think through what is involved in exploiting it, and to learn from experience are all strengthened through education.
- Third, investment in education provides a societal asset base in the form of intellectual ideas, knowledge, information, inventions, patents, copyrights and the like — the knowledge resources available in any society. This knowledge base may lead to the development or discovery of new entrepreneurial opportunities for those interested in starting new firms. It also provides a pool of capable employees and technical competence needed to get a business off the ground. The image that comes to mind is that of a water table. The higher the level of the knowledge table, as it were, the more fertile the soil in which new businesses can start and flourish. But the richness of the soil is not determined by education alone. A critical ingredient is the broader set of social and cultural values that drive entrepreneurship. This constitutes the fourth contextual factor.

Factor 6: Culture

Providing a cultural analysis of 10 countries is beyond the scope of GEM. Nonetheless, an attempt has been made to understand how entrepreneurship is perceived in each country, the recognition that is given to entrepreneurs and prevailing attitudes toward their success or failure. Underpinning this is the belief that no matter how rich a country is in opportunity and how well endowed it is with capacity for business start-ups, the extent to which society regards the pursuit of opportunity as socially legitimate will impact the level of entrepreneurial activity. A set of social and cultural values that legitimizes — indeed encourages — new enterprise is a prerequisite of entrepreneurial activity and a defining feature of an entrepreneurial society.

One cultural factor, the expectations regarding women and their participation in entrepreneurial activities, was discussed along with demographic factors. It is clear that countries with higher levels of entrepreneurial activity have more women involved in firm start-ups. But several other national

features associated with entrepreneurship and firm start-ups have also been identified. Two reflect dispositions or attitudes relating to national norms regarding entrepreneurial efforts and the social values of independence. The third is related to the level of income disparity within the 10 countries in this analysis.

The data assembled from the key informants included six items related to the value placed on independence and autonomy in the workplace. Typical items were "In my country, the social security and welfare systems provide appropriate encouragement for people to take the initiative to be self-sufficient" and "In my country, most younger people believe they should not rely too heavily on the government." The result was an index that shows a very high association with levels of firm start-ups; there was a correlation of about 0.9 between the "independence index" and the level of business start-ups.

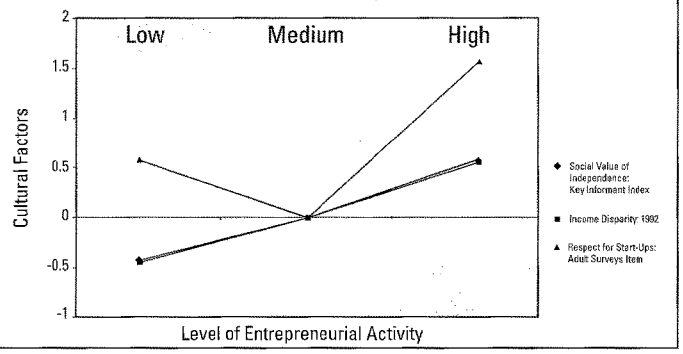
A second measure was an item included in the adult population surveys, including "Do you think starting a new business is a respected occupation in your community?" The percentage that responded "yes" varied from 8 percent for Japan and 38 percent for the United Kingdom to 86 percent for Canada to 91 percent for the United States. This also has a positive correlation with firm start-ups of about 0.45.

There is one further component of an entrepreneurial culture: its capacity to accommodate differences in the level of income among individuals or households.[23] One useful measure is the ratio of total income (or consumption) controlled by the wealthiest 20 percent of the population divided by the total income (or consumption) controlled by the poorest 20 percent. In the early 1990s this varied from 3.6 for Denmark and Finland, where the 20 percent of the households with the highest annual income controlled 360 percent more income than the 20 percent with the lowest annual incomes, to the United States, where the ratio was 9.4 — almost a ten-fold difference. This measure of income disparity is strongly associated with higher levels of firm start-ups with a correlation of about 0.81.

The causal relationship is, however, problematic. On one hand, higher levels of income disparity may provide higher levels of demand and markets for unique goods and services, as well as a pool of financial resources for investments in new firms. On the other hand, entrepreneurship, while it creates wealth for a society in the form of economic growth and employment, also creates wealth for individuals who succeed in the process. A strong association has been established between income differentials in the early 1990s and start-up rates within a country. The probability is that the higher the rate of start-up the greater the number of wealthy individuals. Tolerance of income disparity, respect for those who accumulate wealth through entrepreneurial endeavors, and the absence of stigma attached to those whose entrepreneurial initiatives fail are the hallmarks of a strong entrepreneurial culture.

The relationship between these three aspects of cultural differences — a national emphasis on independence and self-reliance, respect for those starting new businesses and the degree of income disparity — and the level of entrepreneurial activity is presented in Figure 14.

Figure 14
Level of Entrepreneurial Activity Groups and Cultural Factors



Two of these items have a strong linear relationship with the level of national entrepreneurial activity: the "independence index" and the level of "income disparity." The respect for start-ups is very high for the countries with high levels of entrepreneurial activity, somewhat lower for those with a moderate level of activity, and slightly higher for those with a low level of activity. This suggests that the people in those countries may have learned that it is socially acceptable to express verbal approval for the idea of start-ups even if they are not doing it themselves. This is certainly a step in the right direction toward general cultural acceptance.

What is noteworthy is the clear perception among key informants that culture, broadly defined, plays a key role in entrepreneurship. In some countries, this perception is shared by the government as well. In the United Kingdom, for example,[24]

> "the government's aim is to create a broadly based entrepreneurial culture, in which more people of all ages and backgrounds start their own business. In the U.S., entrepreneurship is widespread because entrepreneurs are highly regarded and well rewarded. In the United Kingdom, entrepreneurs are still too often viewed as mavericks". (Competitiveness White Paper, 1998, Page 15.)

The use of the word "maverick" encapsulates the point perfectly. Derived from the name of the 19th century Texan cattle owner who left the calves of his herd unbranded, maverick has two definitions in the Oxford English Dictionary: a late 19th century definition as "a masterless person, one who is roving and casual," plus a more contemporary definition, "an unorthodox or independent-minded individual." Contemporary entrepreneurs may not be "roving and casual" but they certainly value independence. Whether or not a society is entrepreneurial depends in part on the legitimacy and esteem accorded to those who pursue the entrepreneurial route or, as it is often called, "the road less traveled."

VII. NATIONAL COMPARISONS

In this section, summary findings are presented for each GEM country. Using the array of data resources developed in this project, the summaries provide an excellent profile of each country's most significant findings in three areas: Level of Entrepreneurial Activity; Unique National Features; and Key Issues. The national summaries are listed in descending order according to their level of entrepreneurial activity.

High Level of Entrepreneurial Activity

United States

Level of Entrepreneurial Activity:

- At any point in time, 8.5 percent of the U.S. adult population is starting new businesses — the highest start-up rate among the GEM countries.
- The percentage of women starting new businesses (7 percent) is more than 10 times higher than the two countries with the lowest rate (Finland and France, .6 percent).
- Approximately 5.5 percent of the population invests directly in new business start-ups. When extrapolated to the entire population, this level of private investment activity suggests that tens of billions of dollars are being funneled into start-ups through informal channels.

Unique National Features:

- The robust rate of start-ups in the U.S. is grounded in a strong entrepreneurial culture. U.S. citizens value entrepreneurship and the independence associated with starting and managing a business.
- Compared to other countries, the U.S. population is highly capable of recognizing entrepreneurial opportunities. A strong infrastructure encourages and supports the pursuit of those opportunities.
- Adults are perceived to possess a greater capacity to start new businesses in part because society esteems entrepreneurship education and entrepreneurial role models are plentiful.

Key Issues:

- Despite efficient diffusion of new technology and the world's most sophisticated formal venture capital network, high technology businesses in the U.S. tend to cluster geographically creating regional imbalances (e.g., Silicon Valley).
- To accommodate the high level of start-ups, it is important to continue growing the capacity of the entrepreneurship support infrastructure, particularly the provision of risk capital to early-stage initiatives and access to technological developments.
- More emphasis is needed on entrepreneurship education at the primary and secondary levels to further enhance the public's acceptance of and involvement in the recognition and pursuit of opportunities.

Canada

Level of Entrepreneurial Activity:

- With an active entrepreneurial culture, Canada's level of start-up activity (6.8 percent) is the second highest among the GEM countries.
- Approximately 3.4 percent of the population directly invests in new business start-ups, which is average for all GEM countries.
- Both key informants and the adults surveyed perceive a relatively large number of opportunities for new start-ups. The level of motivation and capacity to pursue those opportunities are also considered to be higher in Canada than in most other GEM countries.

Unique National Features:

- Like other active entrepreneurial countries, the Canadian culture is perceived to be very supportive of entrepreneurship and society places a relatively high value on personal independence in the pursuit of opportunity.
- Relative to the other GEM countries, the Canadian infrastructure is supportive of a high level of entrepreneurial activity.
- The Canadian venture capital industry is relatively young and the industry pioneers migrated from the banking industry. Thus, a gap exists between what is needed to properly evaluate and structure an equity arrangement in a burgeoning and constantly changing technology sector.

Key Issues:

- Entrepreneurs in Canada have a high level of access to and awareness of debt financing. Their access to both formal (i.e., venture capital) and informal (i.e., private angels) equity capital is more limited, which tends to reduce the availability of start-up stage risk capital.
- The tax and regulatory burden on entrepreneurial businesses is perceived to be excessive in Canada, and government programs designed to encourage and support entrepreneurial activities are inconsistent and lack a proactive, long-term strategy.
- Canada needs to enhance its educational and societal resources toward a greater focus on entrepreneurial skills at all levels of education, training for entrepreneurs on how to access and utilize equity financing, and training for scientific personnel on how to commercialize new technologies.

Israel

Level of Entrepreneurial Activity:

- With a start-up rate of approximately 5.4 percent, Israel ranked, with the U.S. and Canada, as one of the most entrepreneurially active GEM countries.
- In angel activity, Israel ranked first among GEM countries with 6.4 percent of the adult population investing directly in new business start-ups.
- Despite a relatively high level of entrepreneurial activity, the extent to which Israeli adults believe there are ample opportunities for new businesses (28 percent) was just above the average for all GEM countries.

Unique National Features:

- Three key factors account for a large share of Israel's high level of entrepreneurial activity: the rapid pace of the development and transfer of defense technology; a highly educated and motivated workforce; and governmental programs that successfully encourage entrepreneurship.
- Investment in the education and training of the young generation is regarded as a national priority. The Israeli government recognizes the value of education for encouraging potential entrepreneurs, particularly within the high technology sector.
- Israel has recently experienced a significant change in culture and social norms with respect to entrepreneurship. Today, greater emphasis is placed on individualism and on the importance of self-employment. Adult survey findings show that independence is highly valued.

Key Issues:

- Key informants expressed appreciation for the government's programs in support of entrepreneurship, but were concerned about policies and restrictions that still significantly impact the economy (e.g., taxation policies).
- Key informants called for more investment in education to encourage more women to study in technology fields and to provide entrepreneurial training at primary and secondary levels. Informants also suggested that scientific-technological education should include management training to enhance the commercialization of new developments.
- Non-tech entrepreneurship should be recognized as an important source for new firms and employment and should receive assistance as necessary to abolish bureaucratic obstacles and discriminatory legislation.

Medium Level of Entrepreneurial Activity

Italy

Level of Entrepreneurial Activity:

- The business start-up rate in Italy among the adult population is 3.4 percent — slightly higher than all other European countries.
- The rate at which individuals make private investments in new start-up businesses (2.2 percent) is slightly less than that of all other European countries. This is consistent with the key informants conclusion that access to risk capital is problematic in Italy.
- Key informants and the adult survey perceptions maintain that the level of opportunities for new business start-ups in Italy is the highest of the European countries but below average in comparison to all GEM countries.

Unique National Features:

- The level of entrepreneurial activity in Italy among young adults (18-24 years of age) is approximately 8 percent — second only to the U.S.
- In response to high unemployment rates and a decline in jobs in the public sector, an increasing number of young career men in Italy are choosing self-employment as a viable career option.
- Key informants indicated a significant difference in the level and nature of entrepreneurial activity between the South of Italy and the North. In the North, entrepreneurship is highly valued and entrepreneurs are recognized as role models. In the South, however, a variety of cultural issues have prevented such an entrepreneurial culture from developing.

Key Issues:

- Entrepreneurs in Italy are challenged with a variety of issues, particularly with the cost of labor, an increased administrative burden due to compliance with regulations, and a relatively high value added tax.
- The expected future decline in the population (approximately 11 percent by 2025) could be problematic to Italy's efforts to maintain a moderate level of entrepreneurial activity or perhaps to see its level of activity increased.
- Ensuring that the environment is supportive of higher levels of entrepreneurial activity will require more clarity in the legal system, the establishment of appropriate fiscal incentives, and the transformation of the educational system.

United Kingdom

Level of Entrepreneurial Activity:

- The rate of business start-ups in the United Kingdom (3.3 percent) is significantly lower than the most active countries, but not significantly different from other participating European nations.
- The rate of angel investment in new start-ups in the United Kingdom (2.2 percent) is below average for all GEM countries and only greater than that of Japan (.6 percent).
- The general public's relatively low perception of opportunities for new start-ups (16 percent) and the fact that only one-third think that if good opportunities did exist they would start a business is lower than all other all other GEM countries, except Denmark. Key informants also perceive the entrepreneurial capacity to pursue the available opportunities in the United Kingdom to be below the average of all other GEM countries.

Unique National Features:

- The United Kingdom is unique among the GEM nations in having relatively benign government policies.
- Entrepreneurial capacity in the United Kingdom is depressed because a substantial majority of its citizens have inadequate skills. In addition, entrepreneurship education is significantly underdeveloped.
- The entrepreneurial infrastructure in the United Kingdom is more than adequate for the existing level of entrepreneurial activity, and the nation's science base is strong and relatively under exploited.

Key Issues:

- Continued progress must be made in the quality and effective delivery of entrepreneurship education. While advancements are being made in university-based curricula, little is being done at the primary and secondary levels.
- Government support is needed for the new National Enterprise Campaign to enhance the understanding and public support of the beneficial role of entrepreneurship in economic growth.
- Regional Development Agencies should strive to strengthen the entrepreneurial infrastructure by nurturing social networks between entrepreneurs, commercial service providers, technology sources, and formal and informal pools of investment capital.

Low Level of Entrepreneurial Activity

France

Level of Entrepreneurial Activity:

- Despite an average rate of GDP growth, France's rate of new business start-ups (1.8 percent) is among the lowest of all GEM countries.
- Fewer women in France are involved in starting a business than any other GEM country.
- Approximately 4.4 of every 100 adults in France are actively investing their personal funds in new business start-ups. Among GEM countries, France's rate of angel investing is only less than that of Israel (6.4 percent) and the U.S. (5.5 percent).

Unique National Features:

- Both key informants and the adults surveyed see very little opportunity for new businesses in France. Additionally, the key informants believe that the French lack the capacity to recognize and pursue those opportunities that do exist.
- Key informants rated the social value of independence in France lower than any other GEM country.
- Despite a typical proportion of early career men and an above-average participation in graduate education, experts perceive very little motivation or incentive to pursue entrepreneurship.

Key Issues:

- The greatest limit to the level of entrepreneurial activity in France appears to be the social pressure for adults to conform to collective norms and not to independently pursue opportunities.
- Experts believe the government programs designed to support entrepreneurial activity are inconsistent and unpredictable and, in fact, do more to discourage entrepreneurship.
- The experts felt that the educational system in France is mostly oriented toward thinking more than "doing." Though the rate of adults pursuing higher education is relatively high in France, the general business education curriculum is not interdisciplinary. Thus, potential entrepreneurs are not gaining the educational skills they need to adequately recognize and pursue opportunities.

Denmark

Level of Entrepreneurial Activity:

- Entrepreneurial activity in Denmark (2.0 percent) is significantly less than that of the most active GEM countries and below the average for the other European participants.
- Between the ages of 25 and 44, men are almost 10 times more likely than women to be starting a new business in Denmark — the highest male to female ratio in this age group among the GEM countries.
- Key informants regard the availability of opportunities for new businesses in Denmark as being lower than in any other GEM country.

Unique National Features:

- The unemployment rate in Denmark has recently declined to its lowest level in decades, reducing much of the motivation to start a business among the most likely entrepreneurs.
- Denmark's business culture is marked by an absence of large firms, numerous small firms in fragmented industries and a strong disposition towards self-employment.
- Society's "safe-seeking" mindset and numerous small businesses partially explain why Denmark has the lowest level of income disparity among GEM countries.

Key Issues:

- Government programs designed to encourage and support entrepreneurial activity are often too small to have an impact and are highly sensitive to political whims.
- Experts perceive the infrastructure to be generally supportive, but there are concerns over a general lack of risk capital. Such concerns are magnified given the entrepreneurial community's overreliance on debt financing.
- The number of perceived opportunities and the motivation to pursue them are limited in part by the public's general lack of respect for the opportunity-seeking entrepreneur.

Finland

Level of Entrepreneurial Activity:

- The start-up participation rate for the general adult population in Finland (1.4 percent) is among the lowest of all GEM countries.
- Finnish private investment in new start-ups (2.2 percent) is among the lowest of all GEM countries.
- The 1999 World Competitiveness Index, which evaluates the national context for established firms, ranked Finland as the third most competitive country in the world, just after the U.S. and Singapore.
- A series of new policy initiatives are aimed at fostering entrepreneurship; for example: alleviation of administrative burdens and related compliance expenses; reducing indirect salary-related costs; and supporting the EU decision to introduce a lower value-added tax rate.

Unique National Features:

- The Finnish public's tolerance of entrepreneurial success and failure is relatively high; entrepreneurship is perceived to be a worthy career option.
- One fact that might explain the discrepancy between low start-up rates and superior economic growth is the "Nokia Phenomenon." Nokia, the global leader in mobile telecommunications, accounts for more than one-third of GDP growth in Finland.

Key Issues:

- Further cultural change will be required for entrepreneurship to take root in Finland. Key informants noted the absence of a "growth culture" and the need for successful role models.
- Increasing start-up participation rates are likely to entail changes in institutional issues such as the tax regime, social security system and bankruptcy laws.
- The risks inherent in founding and growing new ventures are not adequately provided for in personal and corporate bankruptcy laws or the access to and availability of private equity capital. As a result, a high number of bankruptcies and heavy personal debts were incurred by small business owners in the recession of the early 1990s.
- Even though entrepreneurship is gaining ground in the Finnish education system, a great deal remains to be done if it is to significantly enhance entrepreneurial capacity.

Germany

Level of Entrepreneurial Activity:

- Germany has a below average start-up rate, but among the highest for GEM countries in the low start-up activity group (2.2 percent).
- Germany's entrepreneurial climate has improved recently, and the adult population has a relatively high regard for those involved in starting a new business.
- The rate at which private individuals invest in new start-ups in Germany (4.4 percent) is just slightly less than that of Israel (6.4 percent) and the U.S. (5.5 percent).

Unique National Features:

- Personal wealth creation or bankruptcy, though common consequences of entrepreneurship, are both regarded negatively among the German people.

- Though the key informants thought there were ample entrepreneurial opportunities in the marketplace, only 15 percent of the adults surveyed did. This is consistent with the high risk aversion and "safety-first" mindset prevalent in German society.
- Germany's entrepreneurial support infrastructure is perceived to be relatively weak, particularly the availability of equity financing, professional services and access to new technology, although a wide variety is present.

Key Issues:

- Experts feel that too many government programs, the lack of clarity between public and private initiatives, and the number of restrictive regulations impede the rate of start-ups in Germany.
- Germany lacks effective mechanisms for matching entrepreneurs with sources of private investment.
- One of the most critical issues affecting the level of entrepreneurship activity in Germany is the lack of adequate entrepreneurship education at all levels within the German education system.
- Government programs should serve to create a more positive image of entrepreneurship and to minimize the effects of society's risk aversion and general negative impression of self-reliance.

Japan

Level of Entrepreneurial Activity:

- Japan has one of the lowest rates of independent start-ups among the GEM countries at less than 1.5 percent of the population.
- Only 1 percent of adults surveyed believe that good opportunities for new businesses exist in the Japanese marketplace.
- Private investment in start-up firms is practically non-existent.

Unique National Features:

- Only 8 percent of adults believe that those starting a business are respected; entrepreneurship is not recognized as a legitimate career option in Japan.
- Key informants rated the social value of independence in Japan lower than any other country, except France.
- The motivation to pursue new business opportunities is further reduced by the practice of many larger established firms to promote "lifetime" employment and to base incentive pay on length of service and age.
- Entrepreneurs who fail in their business are unlikely to be able to try again.

Key Issues:

- The Japanese approach to education is encapsulated in the saying, "The nail that sticks up is hammered down." This view along with very little commitment to formal entrepreneurship education is a major inhibiting factor to the level of entrepreneurship activity in Japan.
- The projected decline of the Japanese population by 5 percent between now and 2025 is likely to further depress the rate of new firm formation.
- Though necessary for increasing Japan's level of entrepreneurial activity, the government's commitment to boosting entrepreneurship faces significant obstacles in every direction — social, cultural and institutional.

VIII. ENTREPRENEURSHIP AND PUBLIC POLICY: TEN PROPOSITIONS

Long-term plans for GEM include significantly increasing the number of participating countries. However, even with only 10 countries participating this year, several striking differences emerged. These include differences in the level of entrepreneurial activity, its impact on economic growth, and the specific factors that promote or hinder entrepreneurship within each country. But what is most striking is that, inter-country differences notwithstanding, certain general patterns are already evident. These patterns provide an excellent backdrop against which to elaborate a set of general policy propositions. Principal among the general patterns are the following:

- The strong, positive association between new firm start-up rates and measures of economic prosperity, particularly changes in GDP.
- The fact that there are no countries with high levels of start-up rates and low levels of economic growth. High start-up rates and high levels of economic growth are always associated.
- The correlation of start-up rates with short-term measures of GDP growth was 0.6, suggesting that 36 percent of the variation in national economic growth is accounted for by variation in new firm start-up rates. It is probably appropriate to assume that one-third of national economic growth is related to the activities of established firms, one-third to the entrepreneurial sector and the remainder to the interaction between these two sectors, measurement error or unknown processes. Clearly, this approximation requires further testing and validation over time. In the meantime, GEM data gives strong support for this inference.
- There is a clear quantitative difference between the countries in the high entrepreneurial activity group and those in the intermediate and low activity groups. There is much less difference between the intermediate and low activity groups.

These general patterns endorse the argument that entrepreneurship makes a difference to economic prosperity and that a country without high start-up rates is risking economic stagnation. It is hard to imagine that any government could ignore the contribution made by the entrepreneurial sector to economic well being. Reinforcing this picture is a further pattern for which full data has yet to be assembled; the effect of change in the number of new firms starting, expanding, contracting or closing. This churning or turbulence within the entrepreneurship sector, the process by which entrepreneurial endeavor both creates and destroys economic activity and employment, is an integral part of a strong, healthy economy. This process, labeled "creative destruction" by the Austrian economist Joseph Schumpeter,[25] is captured well in a 1995 report to the U.S. President on the *State Of Small Business:*[26]

> "a high rate of business formation and dissolution is characteristic of a dynamic economy. Changing tastes and preferences, new technologies, and changes in demography and geography are all accommodated by the entry and exit of firms".

The reference to "entry and exit" is important. Countries that are able to replenish the stock of businesses and jobs, and have the capacity to accommodate volatility and turbulence in the entrepreneurial sector, are best positioned to compete effectively in the world arena. The backdrop to the GEM policy propositions is therefore

framed by two core phenomena: the demonstrable impact that entrepreneurship has upon economic growth and the association, which requires further validation, between economic prosperity and the entrepreneurial process of "creative destruction." Hence the first GEM policy proposition.

Proposition 1: *Promoting entrepreneurship and enhancing the entrepreneurial dynamic of a country should be an integral element of any government's commitment to improving economic well being.*

All other policy propositions follow from this first one. Each will now be set out and the rationale behind it summarized.

Proposition 2: *Government policies and programs targeted specifically at the entrepreneurial sector will have the most significant, direct impact.*

- GEM considered two sets of framework conditions: national framework conditions and entrepreneurial framework conditions. The relationship between the national framework conditions and the level of entrepreneurial activity within a country is relatively weak.
- Efforts to improve the general economic and institutional climate for business will benefit the entrepreneurial sector, but the impact is relatively difficult to demonstrate compared to measures designed to improve factors of immediate relevance to the entrepreneurial sector.
- Key factors include the availability of equity finance, cost and access to professional services, and provision of suitable education and training.

Proposition 3: *To be effective, government programs designed to encourage and support entrepreneurial activity must be carefully coordinated and harmonized so as to avoid confusion and enhance their utilization by those for whom such programs are designed.*

- Frustration with government programs emerged as a key issue in at least five GEM countries: Denmark, Finland, France, Germany and Japan. These happen to be the five GEM countries with the lowest level of entrepreneurial activity.
- Key informants in these countries expressed a common set of concerns relating to program duplication, fragmentation and lack of clarity, often reflecting a lack of coordination between relevant government agencies.
- There is evidence, particularly from the U.S., that entrepreneurs using these programs are more likely to successfully launch a business and subsequently develop it. Better program coordination combined with good measures of effectiveness represents a significant policy opportunity.

Proposition 4: *Increasing entrepreneurial activity in any country will entail raising the participation level of those outside the core age group of 25-44 years old.*

- There are substantial age-related differences in terms of those engaged in starting new firms. This is true across all countries.
- Participation in start-ups by those aged 25-44 is greater than that for any other age group.
- Assuming that current age-related levels of participation in entrepreneurship remain unchanged, the impact of projected demographic changes in the next 25 years will, for some countries, significantly depress the level of entrepreneurial activity.

Proposition 5: *For most GEM countries the biggest and most rapid gain in firm start-ups can be achieved by increasing the participation of women in the entrepreneurial process.*

- Men are between 1.5 (Israel, U.S.) and 10 (Denmark) times more likely to be involved in starting new firms than women.
- The relative participation of women engaged in entrepreneurial activity is the highest in those countries with the highest start-up rates: U.S., Canada and Israel.
- Role models exert a powerful influence on prospective entrepreneurs in many GEM countries. Highlighting successful women entrepreneurs could play a significant part in encouraging other women to start their own businesses.

Proposition 6: *Long-term, sustained enhancement of entrepreneurial activity requires substantial commitment to and investment in education at the post-secondary level (college, university or graduate programs).*

- The greater a country's investment in tertiary education, the higher the rate of new firm formation.
- Investment in education creates a knowledge base from which those starting new businesses are able to draw from in the form of skilled employees, technical and other business resources.
- Participation in new venture creation by those who fail to complete secondary education is substantially lower than that for others in the same age group.

Proposition 7: *Developing the skills and capabilities required to start a business should be integrated into educational and vocational training programs at all levels.*

- Individuals are more likely to start a business if they believe they have some of the skills needed to succeed.
- Differences in the assessment of entrepreneurial skills and capabilities of the GEM countries accounts for a significant proportion of the variation in the start-up rates between these countries.
- The GEM key informant assessment of the entrepreneurial skills of the U.S., the country with the highest level of entrepreneurial activity, is at the opposite end of the spectrum to that made by the Japanese experts whose country has the lowest start-up rate.

Proposition 8: *Regardless of education level, emphasis should be given to developing individual capacity to recognize new opportunities.*

- All entrepreneurial initiative springs from the perception of market opportunity.
- The assessment of opportunity made by both GEM key informants and adults in the population surveys has the strongest association with the level of entrepreneurial activity within a country.
- One percent of adults in Japan perceives there to be good opportunities as compared with 57 percent in the U.S. It seems unlikely that Japan has an extreme shortage of opportunities. It seems more likely that the Japanese have not learned how to recognize or value entrepreneurial opportunities.

Proposition 9: *The capacity of a society to accommodate the higher levels of income disparity associated with entrepreneurial activity is a defining feature of a strong entrepreneurial culture.*

- Entrepreneurship fosters national economic growth, generates employment and creates personal wealth; entrepreneurial activity and income disparity are two sides of the same coin.
- There is a strong empirical association between the level of income disparity and new firm start-up rates.
- It is quite possible that income disparity itself leads to higher rates of new firm formation, but it is probable that high start-up rates lead to an accumulation of wealth by those directly engaged in the entrepreneurial process.

Proposition 10: *Government and public policy officials and opinion leaders from all spheres have a key role to play in creating a culture that validates and promotes entrepreneurship throughout society.*

- No matter how rich a country might be in terms of entrepreneurial opportunity, entrepreneurship will not flourish unless the pursuit of opportunity is regarded as socially legitimate, entrepreneurs are respected and their success — or failure — is socially accepted.
- A key measure of an entrepreneurial culture, the social value of independence, has a strong association with the level of entrepreneurial activity.
- In half the GEM countries, more than one-third of all key informants identified prevailing social and cultural values as the single most significant inhibitor of entrepreneurial activity. None of these countries was in the group with the highest level of entrepreneurial activity.

Summary:

For those countries where entrepreneurial activity is an integral and accepted feature of economic and personal life, start-up rates are high (Canada, Israel and U.S.). In all other GEM countries, entrepreneurship and enterprise creation is a structural and cultural anomaly and those involved are considered mavericks. Though two countries have slightly increased their levels of start-up activity (Italy and United Kingdom), there is no evidence of major cultural or structural changes in either of them. It may take dramatic, sustained changes in all aspects of the cultural, political and economic institutions to make the quantum leap forward to join the entrepreneurial economies. Creating a culture of enterprise and the associated conditions to support entrepreneurship will take decades — perhaps generations — requiring a sustained national commitment that transcends the political cycle and a short-term emphasis on the "next election."

IX. CONCLUSION

GEM was originally conceived as a long-term project involving a large number of countries. The first year initiative has served as a pilot and has been very successful. The GEM conceptual model works, a unique cross-national measure of the level of participation in start-ups has been devised and implemented, and a rigorous procedure based on standardized interviews and questionnaires with key informants has proved highly effective in capturing the distinctive dimensions of each country. With minor modifications, all the GEM research procedures can be replicated and extended with confidence.

Fully understanding the core issue addressed by GEM — the relationship between entrepreneurship and economic well being — will entail collecting data from more countries over a longer period of time. Year one provides a snapshot. The limitations of a snapshot not withstanding, what GEM unambiguously shows is that the level of entrepreneurial activity differs significantly between countries. This difference reflects major variations in the degree to which opportunities are perceived to exist, rather than differences in opportunities themselves. Entrepreneurship makes a major contribution to economic well being, both in terms of economic growth and job creation, accounting for roughly one-third of the difference in economic growth rates between GEM countries. Among the many factors that contribute to entrepreneurship, perhaps the most critical is a set of social and cultural values, along with the appropriate social, economic and political institutions, that legitimize and encourage the pursuit of entrepreneurial opportunity.

Given this, it is inconceivable that any government can afford to ignore the contribution that entrepreneurship makes to economic prosperity. Indeed, there is clear evidence of a change taking place, with governments throughout the world making major commitments to boosting entrepreneurship. All too often, however, these commitments are hamstrung by a lack of real understanding of how the entrepreneurial process operates. The plethora of programs and initiatives evident in many GEM countries is symptomatic of this uncertainty. By demonstrating the way in which entrepreneurship contributes to economic well being, GEM aims to create a framework within which effective government policy can be developed. The ten policy propositions outlined earlier constitute the first step in constructing such a framework.

Just as governments cannot afford to ignore entrepreneurship, neither can those engaged in research on major economic or social processes, from whatever field, responsibly ignore the entrepreneurial dimension. To do so is to construct an incomplete picture with limited explanatory power or public policy value. The GEM model and associated data collection has provided a strong conceptual and empirical base for future work.

END NOTES

[1] Report presented to Parliament by the United Kingdom Secretary of State for Trade and Industry, December 1998, *Our Competitive Future: Building the Knowledge Driven Economy* (http://www.dti.gov.uk/comp/competitive).

[2] OECD (Organization for Economic Co-operation and Development.) *Fostering Entrepreneurship: A Thematic Review.* Paris: Organization for Economic Co-operation and Development. 1998.

[3] See descriptions of the organization and programs at http://www.weforum.com.

[4] Birch, David. 1981. "Who Creates Jobs?" *The Public Interest* 65:3-14.

Zoltan Acs and Bruce Phillips. 1997. "Why Does the Relative Share of Employment Stay Constant?" Reynolds, Paul D. et al (Eds), *Frontiers of Entrepreneurship Research*: 1997. Wellesley, MA: Babson College. U.S. Small Business Administration, 1999, www.sbaonline.sba.gov. David Birch. 1987. *Job Creation in America.* N.Y.: Free Press.

[5] *Financial Times*, 1/2 May 1999.

[6] See endnote 1.

[7] Thurik, R. "Small Firms, Entrepreneurship, and Economic Growth." Rotterdam, The Netherlands: Erasmus U. F. de Vries Lecture, 1994.

[8] Schreyer, Paul. 1996. "SMEs and Employment Creation: Overview of Selected Quantitative Studies in OECD Member Countries," Paris, France: OECD, STI Working Papers 1996/4.

[9] More complete conceptual and operational definitions are provided in the *Reference Report* and the *Operations Manual.*

[10] Details of all data collection procedures, including all interview schedules, and the creation of the master data file (which contains more than 400 items) is provided in the GEM *Operations Manual.* The actual data, much of which is confidential, is considered proprietary, for use only by the GEM national teams at this time.

[11] OECD (Organization for Economic Co-operation and Development.) Quarterly National Accounts Database. Jan.- March 1999 (http://ww.oecd.org/std/gdp.htm).

UNESCO. (United Nations Educational, Scientific, and Cultural Organization.) Statistical Yearbook: 1997. Paris, France: UNESCO Publishing and Bernan Press, 1997. United States Census Bureau. International Data Base. Washington, D.C. (http://www.census.gov/ftp/pub/ipc/www/idbnew.html). World Bank. *World Development Indicators*: 1998. Washington, D.C.: The World Bank, 1998. Major sources for Israel, which is not part of the OCED, included sources from the Israel Central Bureau of Statistics (http://www.cbs.gov.il) and the Bank of Israel (http://www.bankisrael.gov.il).

[12] This work was coordinated through Audience Selection (a division of Taylor Nelson Sofres plc) of London, United Kingdom, who have working relationships with commercial survey research firms in all 10 of these countries.

[13] This makes clear the level of confidence justified by the data collection procedure. If the vertical bars do not overlap, then the differences are statistically significant at the 0.5 level. In most cases, if the sample size is doubled, the confidence intervals are cut in half. They are never zero.

[14] The most widely used measure of association in research is the Pearson Product Moment Correlation, generally referred to as "the correlation." It is basically a means for precisely describing the degree of association between two variables, measured on an interval scale (with constant, meaningful differences between the who values, as with temperature.)
A correlation of zero indicates no association between two variables; a correlation of 1.0 indicates a perfect correlation. If a correlation was unlikely to have occurred by chance less than 5 percent of the time (in less than one in 20 occurrences), it is generally considered statistically significant. Very low correlations (or 0.05) may be statistically significant if based on a large number of observations. Conversely, only very high correlations are statistically significant (0.75 or greater) when the number of observations is small, as with the nine or 10 cases available for the current analysis. If one variable is considered to be a cause of a second variable, the amount of impact may be estimated by squaring the correlation. For example, if the correlation between a cause variable and an effect variable is 0.70, the cause variable may be considered to account for 49 percent of the variation in the effect variable. The other 51 percent would be attributed to other sources of influence.

[15] The source was OECD (Organization for Economic Co-operation and Development.) Quarterly National Accounts Database. Jan.- March 1999 (http://ww.oecd.org/std/gdp.htm), supplemented by data from government sources in Israel, described in a previous endnote.

[16] Birch, David. 1981. "Who Creates Jobs?" *The Public Interest* 65:3-14.

[17] Estimates provided in a personal communication from The Research Institute on the Finnish Economy in Helsinki (1 April 1999).

[18] The data was taken from K. Schwab and J. Sachs. *The Global Competitiveness Report: 1997.* Geneva, Switzerland: World Economic Forum, 1997. However, considerable work was required to adjust rank order data to provide interval level data for each country. These were estimated using multiple regression analysis.

[19] A panel study of start-ups and new firms in Wisconsin in 1993-95 found that those that received government assistance were grateful for the help, rated it highly and had more successful initiatives, P. Reynolds and S. White, *The Entrepreneurial Process*, Westport, CT: Quorum, 1998.

[20] All population data for all 10 countries were taken from United States Census Bureau. International Data Base. Washington, D.C. (http://www.census.gov/ftp/pub/ipc/www/idbnew.html)

[21] Projections for 100 years into the future are available from the United States Census Bureau. International Data Base. Washington, D.C. (http://www.census.gov/ftp/pub/ipc/www/idbnew.html)

[22] Table 2.10 of World Bank. *World Development Indicators: 1998.* Washington, D.C.: The World Bank, 1998.

[23] Table 2.8 of World Bank. *World Development Indicators: 1998.* Washington, D.C.: The World Bank, 1998.

[24] U. K. Department of Trade and Industry, Competitiveness White Paper, 1998, Page 15.

[25] Schumpeter, J.A. 1934. *The Theory of Economic Development.* Cambridge, MA: Harvard U. Press.

[26] U.S. Government Printing Office. 1996. *The State of Small Business: A Report of the President, 1995.*

For more information on the Global Entrepreneurship Monitor contact:

Paul D. Reynolds
Babson College/London Business School
reynoldspd@babson.edu
www.babson.org

Michael Hay
London Business School
mhay@lbs.ac.uk
www.lbs.ac.uk

S. Michael Camp
Kauffman Center for Entrepreneurial Leadership
at the Ewing Marion Kauffman Foundation
mcamp@emkf.org
www.entreworld.org

For additional copies of this Executive Report, contact:
www.entreworld.org
888-777-GROW (4769)

GLOBAL ENTREPRENEURSHIP MONITOR

National Entrepreneurship Assessment:
United States of America
1999 Executive Report

ANDREW ZACHARAKIS

PAUL D. REYNOLDS

WILLIAM D. BYGRAVE

Babson College

Note: This report is on one of 10 developed by countries involved in the first cross-national study of entrepreneurship and national economic growth. It is best understood when reviewed in relation to the cross-national comparisons report, Global Entrepreneurship Monitor: 1999 Executive Report: Kansas City, Mo.: Kauffman Center for Entrepreneurial Leadership, June 1999.

Copyright © 1999, Andrew Zacharakis, Paul D. Reynolds and William D. Bygrave. All rights reserved.

TABLE OF CONTENTS

Page

List of Figures and Tables 1

Executive Summary 2

The Role of Entrepreneurship in the United States 5

The Global Entrepreneurship Monitor 6

U.S. Entrepreneurial Activity 8

Entrepreneurial Activity and Economic Growth 11

Social, Cultural and Political Context 13

General National Framework Conditions 15

Entrepreneurial Framework Conditions 16
- Cultural and Social Norms 17
- Financial Support 17
- Research and Development, Technology Transfer 21
- Education and Training 22
- Commercial and Professional Infrastructure 24
- Government Policies and Programs 25

Entrepreneurial Opportunities and Capacity 27

Regional Diversity 29

Implications for the U.S. Entrepreneurial Economy 31
- Systematic Advantages 31
- Enhancing the System
  - Expand Education and Training 31
  - Government Assistance Programs 32
  - Responding to Structural Shifts 33
  - The Gap in Seed Stage Financing 33
  - Successful Role Models: Power in the Story 33
- Understanding the Entrepreneurial Process 34

Conclusion 35

References 36

Endnotes 39

FIGURES AND TABLES

Figures:

Figure 1: Conceptual Model: The Entrepreneurial Sector and Economic Growth

Figure 2: Establishment Creation and Termination Rates in U.S.: 1982-1995

Figure 3: Start-up Rate, Informal Investor Participation Rate, GDP Growth Rate and Unemployment Rate: Cross-National Comparisons

Figure 4: Entrepreneurial Framework Conditions: Cross-National Comparisons of Key Informant Multi-Item Indices

Figure 5: Cultural and Social Norms Questionnaire Items: U.S. versus GEM Countries

Figure 6: Financial Support Questionnaire Items: U.S. versus GEM Countries

Figure 7: Venture Capital Investment Within the U.S.: 1986-1997

Figure 8: R&D Transfer Questionnaire Items: U.S. versus GEM Countries

Figure 9: Education and Training Questionnaire Items: U.S. versus GEM Countries

Figure 10: Commercial and Professional Infrastructure Items: U.S. versus GEM Countries

Figure 11: Perceived Opportunities, Capacity and Motivation Indices: Cross-National Comparisons

Tables:

Table 1: U.S. New Firm Activity: Selected Estimates

Table 2: Private Equity by Global Region

Table 3: Perceived Opportunities and Motivation to Pursue Entrepreneurial Opportunities

Table 4: Regional Variations in U.S. Firm Births: 1986-88

EXECUTIVE SUMMARY

The United States has one of the highest levels of entrepreneurial activity in the world. Yet there has been little serious attention — either by the national government or other research institutions — to developing a reliable means for measuring and describing the level of entrepreneurial activity. In addition, scholars lack a general understanding of the cultural, social and economic factors that determine the level of activity.

The result is a glaring knowledge gap. Without credible measures, it's difficult to assess the impact on entrepreneurship of a wide range of federal, state and local policies, regulations and legislative changes, as well as geographic and market context. Entrepreneurship is one of America's most important mechanisms for adapting to economic change. But the United States has not focused on understanding how entrepreneurial efforts contribute to economic growth. Thus the United States lacks explicit, research-based policies related to the entrepreneurial sector, the activity that sustains growth and develops tomorrow's industries. In short, U.S. entrepreneurial activity is honored and accepted, but not understood.

The Global Entrepreneurship Monitor (GEM), a joint research initiative by Babson College and the London Business School and sponsored by the Kauffman Center for Entrepreneurial Leadership, was launched in September 1997 to analyze entrepreneurial activity, its impact on national growth, and those factors that affect the level of entrepreneurial activity. The United States and nine other industrial countries were included in the analysis (Canada, Denmark, Finland, France, Germany, Israel, Italy, Japan and the United Kingdom).

GEM's study concludes that as much as one-third of the differences in national economic growth may be due to differences in entrepreneurial activity. A key element in the United States is the annual implementation of 600,000-800,000 new companies that create real jobs. That's a birth rate of 14-16 start-ups for every 100 existing businesses, similar to the level of activity in Canada. Perhaps another two million U.S. businesses are begun each year as self-employment ventures or businesses without employees. As many as 8.4 out of every 100 U.S. adults — 16 million Americans in all — are right now trying to start businesses of their own. In addition, 4.5 percent of American adults report providing, in the past three years, personal funds to individual start-up businesses. More formal start-up funds are provided in the United States at four times the rate, per 1,000 citizens, as in Europe and 60 times the rate as in Asia.

Culturally and demographically, the United States is quite distinctive. Americans accept and respect entrepreneurs; some business terminations are expected and they are considered a normal part of the process. With Canada, the United States has the highest proportion of working adults aged 25-44, the age range of people most likely to start businesses. And unlike most major countries, where population is expected to remain stable or decline, the U.S. population is forecast to grow more than 20 percent over the next 25 years. Further, U.S. women are very active in entrepreneurship, responsible for more than a third of all start-up efforts.

It is not clear, however, that the United States has an optimum entrepreneurial sector. The GEM analysis provides 10 implications for U.S. policy related to entrepreneurial activity:

- Equity seed capital is relatively hard to obtain in the United States. Some experts believe that finding start-up equity financing between $50,000 and $1 million is particularly difficult.
- Venture capitalists provide about $4 billion for U.S. high-end start-ups, or some 37 percent of their $12 billion in new investments each year.

- Informal financial support from friends, family and work associates contributes the lion's share of initial funding, an estimated $56 billion per year. But such private investment is likely to flow through well-developed social networks on the local level. Electronic networking forums, such as ACE-Net, that try to match start-ups with established angels have not, as yet, developed into major sources for start-up funding.
- Local, state and federal governments provide financial support, such as the federal government's Small Business Administration (SBA) guaranteed loan program, to 2-3 percent of small businesses; and a large proportion of these funds are provided to existing small businesses, not start-ups.
- Other federal, state and local assistance programs for entrepreneurs are poorly publicized and marketed; most nascent entrepreneurs do not know they exist. The need for some mechanism to coordinate and "market" these support programs is a common theme among national experts.
- There is considerable regional variation in entrepreneurial activity. While the major urban areas generally have much more activity than rural areas, some urban areas are well known for very high levels of start-ups (Silicon Valley, Boston's Route 128, North Carolina's Research Triangle, etc.) Those regions with higher levels of start-ups tend to have more fully developed legal, accounting, banking and other services for new and small businesses. This provides, in turn, a regional advantage for further start-ups.
- Education in entrepreneurial skills is virtually nonexistent in U.S. primary and secondary schools, as is economics in general: Americans as a whole lack a strong understanding of basic economics.
- In colleges and universities, entrepreneurship programs have grown dramatically in the past 20 years. Hundreds of U.S. colleges and more than 90 university-based centers of entrepreneurship now offer entrepreneurship training. But many GEM interviewees feel the courses are few and limited in depth and the teachers inexperienced. They also find too little training in engineering and technical skills needed to bring technology innovations to market.
- Universities' R&D transfer policies and tax laws dissuade some aspiring entrepreneurs from pursuing market-worthy technologies. Even so, U.S. entrepreneurs are more positive than entrepreneurs in other countries about R&D transfer from universities, government labs, large companies and other entrepreneurial ventures.
- Compliance with U.S. regulations and tax laws is labor intensive and costly. Moreover, regulations generally rely on punitive remedies to achieve compliance rather than incentives. Taxes and regulations are generally perceived to be size neutral; companies big and small are in the same boat. But the relative burden is greater on companies with fewer resources, such as new start-ups. Simplifying compliance and reporting requirements for new and small firms may increase their chance of survival.

The GEM initiative set out to discover to what extent entrepreneurial activity varies among 10 countries: the United States, Canada, United Kingdom, Germany, France, Italy, Denmark, Finland, Israel and Japan. It then pursued whether the level of entrepreneurial activity affects a country's economic growth and what factors make a country entrepreneurial. GEM researchers assembled much relevant statistical material from existing sources; commissioned surveys of 1,000 adults in each of the 10 countries to measure participation in and attitudes toward entrepreneurship; and interviewed more than 300 national experts, 36 in each country, on a wide variety of factors in their country's entrepreneurial sector.

Some of the findings support prior studies. Others have found, for instance, that 67 percent of all new inventions occur at smaller companies. And small businesses create the majority of new jobs — 1.6 million, or 64 percent, of the 2.5 million new jobs created in the United States in 1996, for example. Since 1980, Fortune 500 companies have lost more than five million jobs while the United States as a whole has added 34 million new jobs. These results are consistent with the GEM analysis that suggests a positive relationship between the level of entrepreneurial activity and average growth in Gross Domestic Product (GDP).

Some of the relationships were unexpected. For instance, income dispersion is greatest in the United States. Total income of the top 20 percent of the population is nine times the total income of the bottom 20 percent; this measure is four to six times greater than that in the other GEM countries. The presence of the high-income group may create new demands for goods and services that provide entrepreneurial opportunities and the ability to provide the financial resources to support new ventures. The presence of a large number of well-to-do households, when coupled with social acceptance of status and income mobility, may also provide an incentive to pursue entrepreneurial ventures.

Just as surprising, the GEM study found that such national characteristics as openness to global trade, degree of government interference in markets, physical infrastructure for businesses, and well developed management skills — associated with more success among large, established firms — had no significant relationship with the level of business start-ups.

What the United States does have is a society that places high value on self-sufficiency, individualism and personal initiative. Americans generally do not expect the government to provide for their well-being. And they're likely to accept differences in standards of living. Within that fundamental cultural tradition, Americans are more likely than people in other countries to recognize opportunities for start-ups and to be motivated to pursue those opportunities through the creation of a new venture.

This provides, as the GEM report points out, a basic competitive advantage the United States can ill afford to squander.

THE ROLE OF ENTREPRENEURSHIP IN THE UNITED STATES

New and growing firms, the heart of the entrepreneurial phenomenon, play a substantial role in U.S. economic growth and adaptation. Although Fortune 500 companies have lost more than five million jobs since 1980, the United States has added more than 34 million new jobs.[1] The original research by David Birch indicating that new and small firms create the majority of all new jobs has been replicated in a number of other countries.[2] There is no longer any doubt that new and growing firms are the major source of jobs.[3]

Small businesses in the United States, those with fewer than 500 workers, employ 53 percent of the private workforce, account for 47 percent of sales and 51 percent of private sector GDP.[4] In 1996, small businesses produced an estimated 64 percent, or 1.6 million, of the 2.5 million new jobs created.[5] Those new and small firms with higher growth trajectories are known to provide the largest proportion of new jobs.[6] A small percent (5-15 percent) of the fastest-growing entrepreneurial firms account for a majority of the net new job creation.[7] And contrary to popular perception, most of these growing firms are not high technology enterprises.[8] In addition, these smaller entrepreneurial businesses account for 55 percent of all innovations.[9]

New and small firms compose more than 99 percent of all firms in almost all advanced countries, and their share of employment and contribution to the GDP may be increasing.[10] New evidence suggests that entrepreneurship and new firms are an important career option for those in the labor force. Data commissioned by GEM suggests that one in 12 U.S. adults may be engaged in a new firm start-up, compared to one in 60 in Finland and Japan. As many as two in five U.S. households have one or more adults with past or current experience with new or small firms.[11] More than 40 percent of U.S. men report a period of self-employment during their work career.[12]

New and growing firms are, then, a major source of new jobs, have a critical role in GDP growth, are associated with the restructuring of most economic sectors (where larger numbers of smaller specialized firms are replacing few giant firms), and are a significant career alternative in the work life of many. One might, therefore, expect that contemporary studies of national economic growth would incorporate indicators of entrepreneurial activity and would attempt to better understand the details of the processes linking the entrepreneurial sector to national economic well-being. This is not, however, currently the case. This hiatus provides the basic rationale and opportunity for the GEM initiative. This research program has been designed to establish the role and impact of the entrepreneurial sector on economic growth.

The GEM project has, in the first year, involved systematic data collection on the precursors to national entrepreneurial activity, as well as the level of activity and its consequences. Data collection has been completed on 10 countries, the G-7 (Canada, France, Germany, Italy, Japan, United Kingdom and the United States) plus Denmark, Finland and Israel, which provides a unique opportunity to explore the special situation of the United States. Following a review of the conceptual scheme that forms the basis for the GEM initiative, the special factors associated with the United States will be reviewed in detail.

THE GLOBAL ENTREPRENEURSHIP MONITOR

The Global Entrepreneurship Monitor initiative was created in September 1997 as a joint research initiative by Babson College and London Business School. The central focus was to bring together the world's best scholars in entrepreneurship to study the complex relationship between entrepreneurship and economic growth. From the outset, the project was designed to be a long-term multinational enterprise. Thus, to obtain reliable, comparable data, GEM focused on the G7 countries (i.e., Canada, France, Germany, Italy, Japan, United Kingdom and the United States). Three additional countries, Denmark, Finland and Israel, were added the first year because selected scholars in these countries had particular expertise relevant to the project.

For the purpose of understanding its role in economic growth, entrepreneurship was defined as:

> *"Any attempt to create a new business enterprise or to expand an existing business by an individual, a team of individuals, or an established business."*

Three fundamental questions were implicit in this project:

- *Does the level of entrepreneurial activity vary between countries, and, if so, to what extent?*
- *Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?*
- *What makes a country entrepreneurial?*

Though the anecdotal evidence suggests that entrepreneurship plays a major role in the growth of modern economies, no study has yet developed a clear understanding of how entrepreneurship impacts an economy, what factors influence its role, and whether the entrepreneurial process is consistent across cultures. The GEM model depicted in Figure 1 identifies the key variables under study and how they are related. Moving from left to right, the variables include: Social, Cultural and Political Context; General National Framework Conditions; National Entrepreneurial Framework Conditions; Entrepreneurial Opportunities; Entrepreneurial Capacity; Business Dynamics; and National Economic Growth.

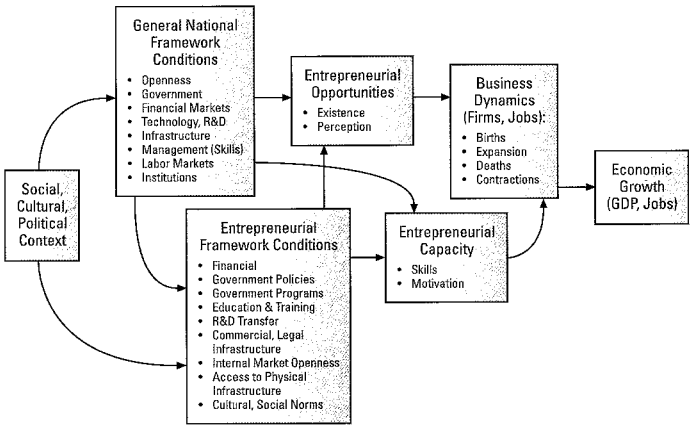
The ***Social, Cultural and Political Context*** encompasses a range of factors that have been shown to play an important role in shaping a country's national framework conditions. Analyzing all such influences is beyond the scope of GEM; however, certain key issues have been considered, including demographic structure, investment in education, social norms and attitudes associated with individual independence and the perception of entrepreneurs.

National framework conditions include general and entrepreneurial. ***General National Framework Conditions*** include the role of government and financial institutions, the level of R&D, the quality and strength of the physical infrastructure, the efficiency of the labor market, and the efficiency and robustness of legal and social institutions. ***National Entrepreneurial Framework Conditions*** comprise the availability of financial resources for new firms, government policies and programs designed to support start-ups, the level of education and training for aspiring and practicing entrepreneurs and access to professional support services (e.g., lawyers and accountants). These factors are expected to be more volatile than the General National Framework Conditions, reflecting an intermediate stage in the overall causal sequence outlined in Figure 1.

Entrepreneurial Opportunities refers to the existence and perception of market opportunities available for exploitation. ***Entrepreneurial Capacity*** refers to the motivation of individuals to start new firms and the extent to which they possess the skills required to adequately pursue them. ***Business Dynamics*** encompasses the process whereby new firms start, grow, contract or die; and ***National Economic Growth*** incorporates a number of standard economic measures, including growth in GDP, changes in employment and per capita income. The continual *economic churn* associated with the birth, death, expansion and contraction of business firms has been shown to closely relate to the rate of job creation.[13] It is assumed that as the rate of economic churn increases, the rate of economic growth will increase as well.

There are three major research activities associated with the GEM initiative. First is assembly of existing standardized economic and socio-demographic data on countries involved from international sources (e.g., World Bank, OECD, UN, etc.). Second, a sample of 1,000 adults was chosen at random in each country to determine participation in and attitudes toward entrepreneurship. Finally, a team in each country completed a careful assessment of their own entrepreneurial sector, including personal interviews with more than 35 experts on entrepreneurship in that country. The primary objective for each participating country was to develop causal interpretations of the core variables in the entrepreneurship process and to assess their role in determining the country's level of entrepreneurial activity. The following report details the U.S. results and compares the United States with the other nine GEM nations.

Figure 1
Conceptual Model: The Entrepreneurial Sector and Economic Growth



U.S. ENTREPRENEURIAL ACTIVITY

Cross-national comparisons of the 10 GEM countries suggest that variation in the level of entrepreneurial activity may account for one-third of the difference in the rate of economic growth. It is not coincidental that the high level of entrepreneurial activity in the United States, relative to all other GEM nations, is associated with one of the longest periods of sustained economic growth in history.

Ironically, in the United States — the exemplar of an "entrepreneurial economy" — the ability to measure or estimate the level of entrepreneurship is quite limited. In fact, not only is it difficult to track the emergence of new firms, it is not even possible to develop a precise census of existing firms. And without an accurate count of existing firms, it is difficult to determine how many new firms have been created.

This problem can be illustrated by the seven different comparisons provided in Table 1. They illustrate seven different ways of tracing new business activity. The top row provides an estimate of the number of start-up efforts identified in a survey of the adult population commissioned by the GEM initiative, discussed below. It was estimated that 7.3 million start-up efforts were under

Table 1
U.S. New Firm Activity: Selected Estimates

	Stage in Entrepreneurial Process	Source of Estimate	Basis for Estimate	Type of Activity	Number at Beginning of Period	Relevant Period	Count/Estimate for U.S.
2	**Start-Up Effort (Gestation)**	GEM Survey	Population Survey (n=1,000)	Start-Up Efforts	Not Measured	During March 1999	7,300,000
3	**New Firm**	Wells Fargo/NFIB	Population Survey (n=36,000)	New Business (purchases excluded)	Not Measured	1996–1997	2,900,000
4	**New Firm**	Wells Fargo/NFIB	Population Survey (n=36,000)	New Business with Employees (other than owners)	Not Measured	1996–1997	620,000
5	**New Establishments (single site of activity)**	U.S. Bureau of Labor Statistics	New Unemployment Insurance Filings, All States	New Establishments with Employees	6,057,000	1994–1995	819,000
6	**Firms (single and multiple site)**	Dun and Bradstreet Duns Market Identifier File	Reconstruct Establishments in Same Enterprises	Any Business with Employees	8,348,068	1996	Not Provided
7	**New Firms (single and multiple site)**	U.S. Census/SBA	New FICA Filings	New Firms with Employees	5,770,090	1994–1995	594,369
8	**New Business Incorporations**	Dun and Bradstreet	State Records, New Filings	Incorporations	Not Measured	1994–1995	770,206
9	**Non-Farm Business Tax Returns**	Internal Revenue Service	Net Change in Tax Returns	Business Activity	22,550,000	1994–1995	499,000

Sources: Row 2: GEM commissioned surveys. Row 3,4: National Federation of Independent Business, (www.nfibonline.com). Row 5,8,9 U.S. Small Business Administration, State of Small Business: 1996, Tables 1.3, 1.2, 1.5. Row 6, Birch, David, et al, Corporate Almanac, Cognetics, Inc. 1997, Pg 17, Firms by Industry: 1996. Row 7, Catherine Armington, "Statistics of U.S. Businesses Micro Data and Tables: Data on Establishments by Firm Size," U.S. Small Business Administration, 4 June 1998, Table 7.5.

way in March 1999.[14] A similar project has estimated the total new businesses, those that have passed the start-up stage, reported by individuals in 1996-1997 at 2.9 million. If those without employees are excluded, however, this number drops to 620,000.

New establishments counted on the basis of new unemployment insurance filings to all state governments were estimated at 819,000 for 1994-1995. Although this would include only those businesses with employees, it would also include establishments (branches or subsidiaries) put in place by existing firms as part of a business expansion. The total number of firms, including single and multi-site enterprises, was estimated at 8,348,000 for 1996, based on careful editing of the files of a commercial credit rating firm. New establishments that were not a form of firm expansion were estimated at 594,000 for 1994-1995, using data assembled from federal Social Security (FICA) registrations supplemented with federal tax filings. New business incorporations filed with all state-level departments of commerce totaled 770,000 for the 1994-1995 period.[15] And the net number of non-farm business tax returns provided to the federal internal revenue service in 1995 was 499,000 more than the 22.5 million filed in 1994.

What is one to make of this array of estimates? First, it suggests that the federal government has not been serious about tracking and measuring the level of entrepreneurial activity in the United States. Hence, there is no way to measure the impact of changes in federal or state policies on entrepreneurial activity. This has led to several private initiatives to fill the gap. Two of them — those sponsored by GEM and the Wells Fargo/NFIB time series — are represented in Table 1; a third is provided by a private consulting firm, Cognetics, Inc. of Cambridge, Mass.[16]

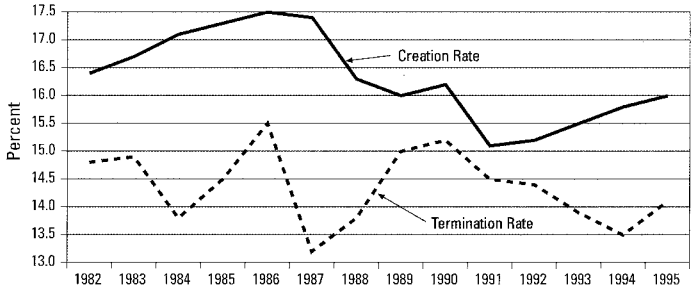
Second, it is clear that quite different things are being measured with different procedures: efforts to start a firm (which may not be successful), incorporation of a firm (which may never go into business), changes in net tax returns filed (reflecting new filings minus filings no longer received), and a substantial amount of full and part-time self-employment. It would seem safe to assume that new firms with employees may number more than 600,000 in a given year, and that another couple of million new business entities — in the form of self-employment — may also come into being each year. That is approximately one new firm with employees for every 300 adults in the United States every year. Since the typical new firm has at least two owner-managers, one of every 150 adults participates in a new firm founding each year. Substantially more — one in 12 — are involved in trying to launch a new firm.

The net result, then, is that the United States has a very robust level of firm creation. Among the six million establishments (single and multi-site firms) with employees, approximately 600,000-800,000 are added each year.[17] This translates into an annual birth rate of 14-16 per 100 existing establishments.[18] Terminations occur for about 12-14 of each 100 establishments. The result is an annual increase of about 2 percent.[19] Figure 2 illustrates the rate of establishment births and deaths over the 1982-1995 period. The year-to-year variation is higher in the establishment termination rate, which has declined slightly in the 1990s. A high level of volatility or churn, compared to other

countries, can be viewed as the rate at which an economy rejuvenates itself. Adding the birth and death rates provides a measure of total volatility. Each year about three in 10 U.S. establishments (30 percent) are new or terminated.

The GEM results indicate that, in addition to the United States, other countries have dynamic economics as measured by the rate of firm births and deaths. Canada's firm volatility rate is also about 30 percent (i.e., 15.5 percent births and 14.7 percent deaths each year). Japan, on the other hand, has very low firm volatility at 7.4 percent (i.e., 3.6 percent births and 3.8 percent deaths each year). Where national data are available on firm turbulence there is a correspondence with the level of start-up activity based on surveys of the adult populations across the GEM nations.

Figure 2
Establishment Creation and Termination Rates in U.S.: 1982–1995

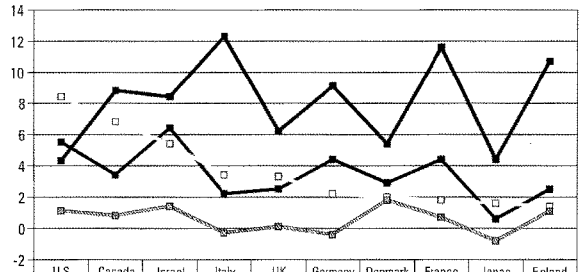


Source: Small Business Administration (1996). ***The State of Small Business.***

A critical feature of the GEM initiative was a survey of 1,000 typical adults in each of the 10 countries. Each person was asked if he or she was currently involved in a new firm start-up and could meet three criteria: (1) some activity to create the start-up in the past 12 months (e.g., business plan, team formation, incorporation, etc.); (2) expected to own all or part of the new business; and (3) the start-up firm had yet to pay salaries for more than three months. The percentage of respondents involved with start-ups[20] in the United States (8.4 percent) and Canada (6.4 percent) are significantly greater than those involved in start-ups in Japan (1.6 percent). As illustrated in Figure 3, there is a strong positive correlation between firm start-up rates and growth in national GDP (0.60)[21] and the employment rate (.47).[22]

The rate at which people provide funds for start-up companies is also an indication of the level of activity in the entrepreneurial sector. In the adult population survey, all 1,000 were asked if they had personally invested in any start-up, not their own, excluding stocks and mutual funds, in the past three years. As depicted in Figure 3,

Figure 3
Start-up Rate, Informal Investor Participation Rate, GDP Growth Rate and Unemployment Rate: Cross-National Comparisons



	U.S.	Canada	Israel	Italy	UK	Germany	Denmark	France	Japan	Finland
Informal Investors	5.5	3.4	6.4	2.2	2.5	4.4	2.9	4.4	0.6	2.5
Start-up rate	8.4	6.8	5.4	3.4	3.3	2.2	2.0	1.8	1.6	1.4
GDP growth rate	1.1	0.8	1.4	-0.3	0.1	-0.4	1.8	0.7	-0.8	1.1
Unemployment	4.3	8.8	8.4	12.3	6.2	9.1	5.4	11.6	4.4	10.7

the percentage of adults who answered yes (5.5 percent or one in 20 for the United States) is also highly correlated to GDP (.93)[23] but not highly correlated with level of employment (.24).[24]

The following will review the elements in the causal mechanisms affecting start-up activity implied in the conceptual model presented in Figure 1. The extent to which the various features — social, cultural and political context; general national framework conditions; entrepreneurial national framework conditions; aspects of the entrepreneurial sector including opportunities and capacity — will be reviewed in turn. This is followed by a discussion of geographic diversity in firm start-ups across the United States. The conclusion reviews the implications of these findings for the capacity of the United States to maintain its role as a leading "entrepreneurial economy."

SOCIAL, CULTURAL AND POLITICAL CONTEXT

Five distinctive features of the context of all countries were explored for the 10 GEM countries. These included the age structure of the population, involvement of women in entrepreneurial activities, national emphasis on educational activities, anticipated population growth, and the level of income disparity. For all factors, the United States had — compared to most GEM countries — a very favorable situation.

Age structure:[25] The majority of those involved in new firm start-ups are 25-44 years old. Among the 10 countries in the GEM analysis, the United States (along with Canada) was among the highest in terms of the percentage of working-age adults (18-64 years) in this age range. This was 10 percent higher than the average across countries and 20 percent higher than the country with the lowest proportion of the population in this age group. As the proportion of adults in the "entrepreneurial years" had a correlation of about 0.7 with overall start-up rates, this provides the United States with a considerable advantage.

Involvement of women: Countries with a higher overall level of start-up activity also tended to have a larger proportion of women involved. Within the United States, the ratio of reports from women (7.6 percent) to men (12.5 percent) at 0.61 is among the highest of all GEM countries; Israel is slightly higher at 0.64. For Finland and Japan, it is one woman involved in start-ups for every three or four men. Clearly, women in the United States are very much involved in entrepreneurial activities and are a major reason for the higher level of start-up activity in the United States. It seems unlikely that women will become less involved in the immediate future. If women's participation reaches parity with U.S. men, it would increase the U.S. start-up rate another 20 percent.

Future population growth — 1999-2025:[26] A substantial body of research indicates that the most powerful factor encouraging entrepreneurial activity is anticipated increases in demand for goods or services. Expected population growth is a basic indicator of expected growth in demand. In the cross-national analysis, projections of population growth for 1999-2025 had a correlation of 0.75 with levels of start-up activity. Countries expecting population growth had more current start-up activity. Five of the GEM countries have negative population projections for the next 25 years (Italy, Germany, France, Japan and Finland), two have zero population growth projections (Denmark and United Kingdom) and three expect growth of more than 20 percent (Canada, Israel and the United States). This fact alone indicates a positive context for entrepreneurship in the United States for the foreseeable future.

Investment in education: Advancement of knowledge:[27] Systematic data on the societal investment in education indicate no difference among the 10 GEM countries in terms of primary and secondary educational activities. In all countries almost all of the eligible young people are involved in age-appropriate primary and secondary educational programs. Hence, it is unrelated to differences in start-up behavior.

Involvement in post-secondary or tertiary activities, such as vocational, college or university, or graduate degree programs indicates a substantial variation. The variation in 1995 has a correlation of about 0.65 with firm start-up rates across the 10 GEM countries. In this regard, the United States and Canada have a dramatic advantage, with 81 percent of age-

appropriate individuals involved in tertiary education in the United States and 103 percent in Canada. (This is more than 100 percent because older persons have returned to school with their younger compatriots.) The comparable figure is 40-50 percent for all other GEM countries except Finland, where it is 67 percent.

Maintaining a national system of tertiary educational institutions and the broad range of ancillary programs in research and knowledge development represents a massive societal commitment. This effort takes a long time to develop and represents a considerable on-going investment. It will provide, however, a continuing source of creativity, innovation, and new knowledge in all domains of human activity — law, the arts, science, medicine, engineering, technology, etc.

Further, the tertiary educational experience tends to provide, beyond skills and knowledge, encouragement to be independent and autonomous in intellectual matters. Those that challenge the status quo, or at least understand current practices in detail, are predisposed to consider new ways to do the conventional. Clearly, it encourages a spirit of challenge and change and develops skills at opportunity recognition.

This may be a basic competitive advantage the United States can ill afford to squander.

Income dispersion:[28] All societies have some persons, or households, with more income or consumption than others. The degree of such dispersion is often measured by dividing the total income of the wealthiest 20 percent of the population by the total income of the poorest 20 percent of the population. This ratio allows for systematic cross-national comparisons. Income diversity in the early 1990s has a correlation of 0.81 with start-up rates in early 1999. Among the nine GEM countries with income diversity data (it is missing for Japan) the United States is clearly at the top of the list, with a ratio greater than 9. This means that the total income (or consumption) of the top 20 percent of the population is nine times greater than the total income (or consumption) of the bottom 20 percent.

Causality is, however, ambiguous. Higher income dispersion may provide the accumulated savings required for investment in new firms, and high income individuals and households may create demand for goods and services that provides opportunities for new firms. Hence, income dispersion may increase entrepreneurship. In contrast, the accumulation of wealth by successful entrepreneurs, increasing the amount in the upper 20 percent may well contribute to income dispersion.

Regardless of the causal relationships, the correlations are strong and pervasive. It is clear that the acceptance and toleration of income diversity is a critical asset. This appears to be the case in the United States and, if it continues, would contribute to maintaining a high level of entrepreneurial activity.

GENERAL NATIONAL FRAMEWORK CONDITIONS

An annual ranking of the relative competitiveness of the major economies of the world is based on the development of multi-item indices of eight national framework conditions. These include measures related to external market openness for global trade: the extent to which government does not interfere with the operations of the national markets, the presence of globally competitive financial markets, the availability of sophisticated research and development, a physical infrastructure suitable for business, the development of managerial skills among the managers and administrators within the country, flexible labor markets, and institutions that support a market economy. These eight dimensions are combined into a single number that is considered to represent the extent to which each of 53 countries are competitive in the global economy.[29]

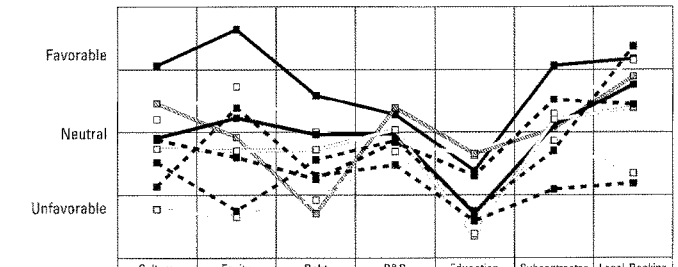
None of these measures, however, have a significant relationship to the measure of business start-ups developed for the 10 GEM countries. The highest correlation is between the 1997 measure of national competitiveness and the winter 1999 measure of firm start-ups, which is 0.4. However, since the entire global competitiveness program is designed to measure the context for large, established firms, there is no reason to be concerned about this outcome.

ENTREPRENEURIAL FRAMEWORK CONDITIONS

National entrepreneurial framework conditions are expected to have a major impact on the entrepreneurial sector, as illustrated in the conceptual scheme in Figure 1. Assembling reliable data for cross-national comparisons of these framework conditions is a major undertaking. A very substantial effort was implemented to provide reliable measures suitable for cross-national comparisons.

In nine of the 10 GEM countries, national teams completed in-depth interviews and questionnaires with 36 key informants or experts on entrepreneurship. Four individuals were selected as experts in each of the nine entrepreneurial framework conditions. The topics covered in the interviews included observations on national opportunities for entrepreneurship, and the population's skills and motivation to pursue such opportunities. Each expert also responded to a series of items on a questionnaire related to the nine entrepreneurial framework dimensions. Multi-item indices were created to provide comparisons across countries for each dimension. A summary comparison of the major results for those framework conditions where the patterns were significant are presented in Figure 4. These expert ratings are supplemented, where possible, with responses to specific questions

Figure 4
Entrepreneurial Framework Conditions: Cross-National Comparisons of Key Informant Multi-Item Indices



	Culture	Equity	Debt	R&D	Education	Subcontractor	Legal, Banking
U.S.	0.8	1.23	0.44	0.21	-0.46	0.8	0.88
Canada	0.15	0.55	0	-0.12	-0.28	0.22	0.86
Israel	0.34	-0.06	-0.97	0.29	-0.26	0.04	0.67
UK	-0.07	0.17	-0.03	-0.02	-0.97	0.08	0.57
Germany	-0.2	-0.22	-0.21	0.03	-1.24	0.15	0.29
Denmark	-0.09	-0.3	-0.56	-0.12	-0.52	0.39	0.33
France	-0.92	-1.01	-0.81	-0.23	-1.21	-0.1	-0.49
Japan	-0.65	0.29	-0.52	-0.39	-1.06	-0.68	-0.61
Finland	-0.36	-0.94	-0.33	-0.1	-0.94	-0.22	1.03
Correlation to Start-up Rate	0.87	0.79	0.58	0.69	0.66	0.71	0.55

asked of all 1,000 respondents in the adult population surveys.

Comparisons across countries help to determine the extent to which the entrepreneurial framework conditions support entrepreneurial activity. Figure 4 illustrates that the United States is typically perceived more favorably on the entrepreneurial framework conditions than other countries. In particular, the United States is viewed more favorably on the socio-culture, finance (equity and debt), and subcontractor dimensions. The United States is not significantly lower on any of the dimensions, although education and training seem to be an area of great concern in all GEM countries.

A summary of the responses from experts in each country did not always indicate a strong relationship to the level of entrepreneurial activity. The remainder of this report details the findings for those conditions that were most highly correlated with the level of activity across countries, namely: Cultural and Social Norms, Financial Support, R&D Transfer, Education and Training, and Commercial and Professional Infrastructure. A brief summary of the review of comments on Government Policies and Programs is also provided because of interest in this topic.

All of these factors are expected to affect the national entrepreneurial sector, as reflected in the capacity to observe opportunities as well as the capacity and motivation of the citizens to exploit those opportunities. Variations on these dimensions are reviewed in the following section.

Cultural and Social Norms

From in-depth interviews with experts across the country, it is apparent that the high rate of business start-ups, angel investing and technology commercialization in the United States are made possible by a culture that strongly encourages and supports self-enterprise. Starting and owning one's own business has long been a central component of the great American dream of self-realization. Americans generally favor self-starters and the independent spirit that undergirds their success. Business failures are generally not considered a personal failure and many consider "not to have tried" as a sign of personal weakness. Successful entrepreneurs not only are accepted but are often considered "champions of industry" and presented as role models for others. As a result there are numerous successful entrepreneurial examples to emulate in the United States.

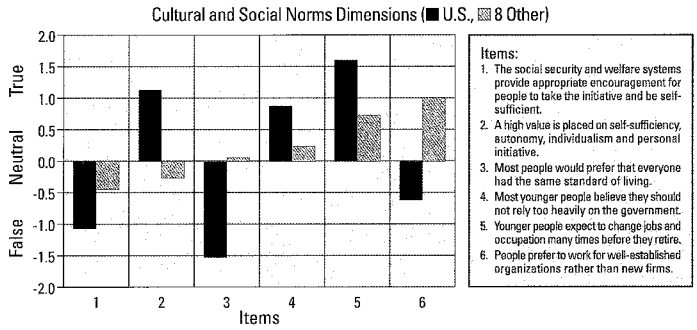
Comparisons of key informants in the United States and eight other countries on the cultural and social norms items are presented in Figure 5. The U.S. key informants consider the United States as a place where there is a high value placed on self-sufficiency, individualism and personal initiative (Item 2) and generally don't rely on the government to provide for their well being (Item 4). Moreover, those in the United States are likely to accept differences in standards of living (Item 3). This reflects acceptance of the U.S. level of income dispersion, which — as discussed above — is the highest among the 10 GEM countries.

In terms of work career, younger people are seen as expecting to have a series of jobs with different organizations (Item 5 in Figure 5) and much less likely than those in other GEM countries to seek a career only in large, established organizations (Item 6).

Financial Support

The U.S. financial support infrastructure is considerably more developed than most other countries (see Figure 4). There are two primary categories of

Figure 5
Cultural and Social Norms Questionnaire Items: U.S. vs. GEM Countries



financial support, debt and equity. Compared to other countries, the U.S. key informants consider obtaining equity and debt as somewhat less of a problem (Items 1 and 2 in Figure 6). Key informants also don't think that federal government programs to help improve access to debt capital are making a substantial difference in the level of entrepreneurial activity (Item 3 in Figure 6), although no key informants considered this a major source of new firm financing. In the United States, the highly visible SBA loan guarantee programs help a large number of small firms, but only 2-3 percent of the total number of start-ups.[30]

Figure 6
Financial Support Questionnaire Items: U.S. vs. GEM Countries

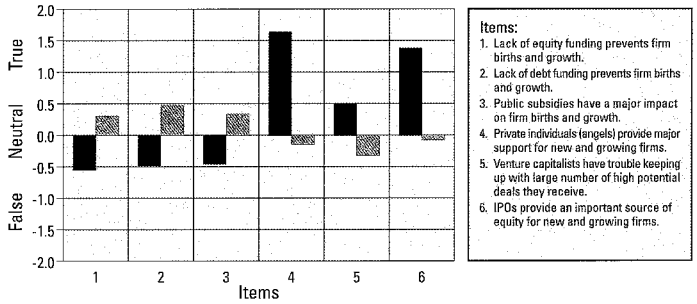
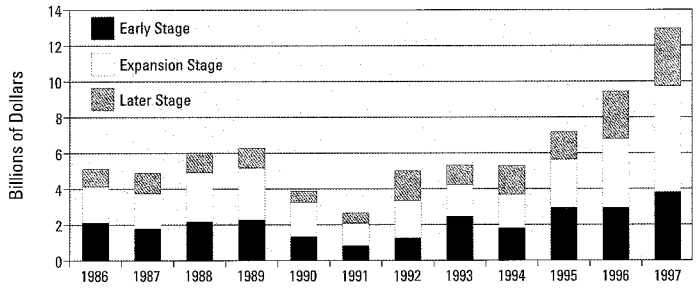


Figure 7
Venture Capital Investment Within the U.S.: 1986–1997



Source: U.S. Venture Capital — Industry Overview and Economics: Summary Document. McKinsey & Company, September, 1998.

However, while there are numerous sources for equity financing, success in raising equity capital requires successful promotion of the business opportunity and close personal contact with the sources of equity. In 1996, the U.S. private equity market exceeded $100 billion under management.[31] Formal venture capitalists had approximately $30 billion under management, including new investments of more than $12 billion in 1997 (Figure 7). In addition, approximately 37 percent of the pool, or $4 billion, was directed toward seed and start-up companies.

Compared to other regions of the world, the availability of private venture capital is substantial. An estimate of the funds available for the United States, Europe, Asia and Latin America is provided in Table 2. Not only is 71 percent of the total managed within the United States, but there is about $125 available for each person in the United States, compared to $30 for each person in Europe, $3 for each person in Latin America, and less than $2 for each person in Asia (excluding China and North Korea). The availability of formally managed private venture capital is substantially greater in the United States than anywhere else in the world.

Among the 600,000-800,000 new firms with employees started in the United States each year, venture capital funds assist less than 1,000. Where are the other 799,000 getting their funds? These formal sources appear to be supplemented, in a major way, by informal investments provided from the friends, family and work associates of those implementing new firms. Estimates from the adult population survey were made of the amount of informal investment in new start-ups, **excluding** new businesses of the respondent and formal purchases of equities. Of each 100, 5.5 reported such an investment in the past three years, and the average annual investment was slightly over $5,000. This amounts to an annual total investment for 191 million adults of $56 billion dollars.[32] If, as presented in Table 1, 7.3 million start-ups are in process in the

Table 2
Private Venture Capital by Global Region

	Private Equity ($ Millions)	Total Population (Millions)	Private Equity per Person (U.S. $)	Allocation to Regions
Year	1996	1997		
U.S.	33,577*	268	125.29	71%
Europe	8,900	291	30.58	19%
Latin America	1,511	494	3.06	3%
Asia	3,000	1,761	1.70	6%
Total	46,988	2,814	16.70	99%

Sources: Private Equity: "The search for the perfect gift horse" *Latin Finance*, 97(May 1998): 23. Population Estimates: World Bank. 1999. World Development Indicators: 1999. Table 1.1. Asia includes East Asia and Southwest Pacific, excludes China and Democratic Republic of Korea.

* In 1997 and 1998, new commitments to U.S. venture capital funds totaled $38.7 billion.

United States, this is about $7,000 per start-up effort. If three million new firms — with and without employees — are implemented each year, this is slightly less than $20,000 per new firm.

So the total provided to start-up firms may be about $60 billion per year, $4 billion from formal private equity sources (venture capital) and $56 billion from informal private contributions. This informal private funding is widely diffused among all geographic regions and all economic sectors of the U.S. economy.

The majority of national experts felt that there is plenty of equity available. This is reflected in the high relative ratings to Item 4 in Figure 6, related to funds provided by business angels, and the access to formal funding via initial public offerings. However, a significant number perceived supply to be limited and access difficult for seed stage capital. As Figure 7 suggests, as venture funds have grown larger ($183 million under management on average[33]), venture capitalists have shifted their focus toward later-stage investments. The rise in lucrative Internet-based investment opportunities and the increasing pressure to invest a larger percentage of available funds may redirect the industry toward more early-stage deals in the future. While IPOs are considered a strong source of growth capital and the most active exit mechanism for venture capital investments, the key informants recognize that their success is closely tied to the robust U.S. economy and the strength of financial markets overall. As a result, IPOs historically decline or disappear during recessions and weak stock market cycles.[34]

Item 4 in Figure 6 indicates that the respondents perceive a strong supply of individuals making private investments, but that, for the most part, such angel investors are hard for entrepreneurs to identify. To overcome this difficulty, a number of angel networks have been established. The most wide reaching of these networks are electronic forums (e.g., ACE-Net) where potential entrepreneurs can advertise their business opportunities and financial needs. However, the experts argue that most private

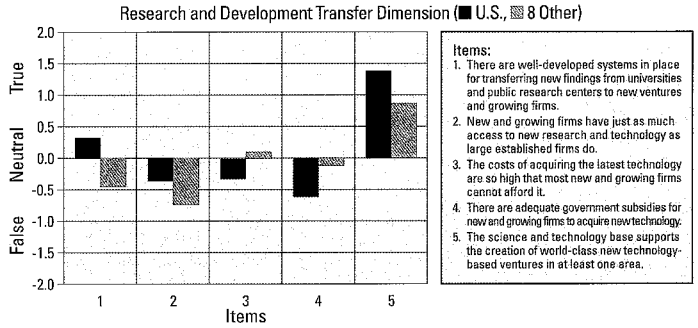
investment deals are syndicated and focused in the angels' local area so that they can stay closely involved in the growing firm. Because of these constraints, most key informants don't think that the electronic forums have been very successful at networking entrepreneurs and angel investors.[35]

Research & Development, Technology Transfer

Technology transfer appears to be strong in the United States, although not significantly stronger than most other GEM countries (see Figure 4). In the recent past, R&D has been vibrant in the United States, especially among smaller companies. Sixty-seven percent of all new inventions occur in smaller companies (i.e., those under 500 employees).[36] Technology is transferred from a number of sources in the United States, including universities, large corporations, entrepreneurial companies and government labs. More than 200 universities are currently engaged in technology transfer, versus only 25 in 1980, adding $21 billion and 180,000 jobs into the economy each year.[37] These institutions are a rich source of new inventions and innovations, yet only a fraction of all innovations developed in the United States are ever successfully commercialized.

As evident in Figure 8, the U.S. key informants are more positive about R&D transfer activity in the United States than key informants in the other GEM countries. On four of the items the situation in the United States is considered to be in better shape than in the other countries, including the presence of mechanisms to promote technology transfer to new firms (Item 1), size-neutral access to new technology (Item 2), costs for new technology that do not discriminate against small firms (Item 3), and the presence of technological and scientific advances that can support world-class new firm development (Item 5). Only with regard to the presence of government

Figure 8
R&D Transfer Questionnaire Items: U.S. vs. GEM Countries



subsidies for technology transfer to new firms (Item 4) are the U.S. key informants less positive than their counterparts in other GEM countries.

Although U.S. tech transfer is vibrant relative to other GEM countries, key informants noted that university policies and tax laws dissuade some aspiring entrepreneurs from pursuing market-worthy technologies. The key informants generally felt that there was a proper balance between proprietary protection and available information. More protection might impede technology advancement, whereas less protection might be a disincentive to pursue innovation. The key informants noted that while a tremendous number of inventions are available, most R&D facilities have a difficult time finding entrepreneurs or organizations to commercialize their innovations.

Education and Training

Key informants across all participating nations viewed education and training in neutral to unfavorable terms (see Figure 4). Key informants in Canada and Israel perceive strong availability of entrepreneurial training in their countries, followed closely by the United States and Denmark. The primary concern from key informants across all countries was the lack of entrepreneurship education at primary and secondary levels. Key informants from those countries where education was viewed less favorably (i.e., Germany, Japan, United Kingdom and France) believed that the quality of entrepreneurship instruction is inadequate at all levels of education.

Like most countries, entrepreneurship education is a relatively new phenomenon in the United States. Twenty years ago, only a handful of colleges even offered entrepreneurship courses. Today, entrepreneurship education is proliferating across the country. Hundreds of colleges offer some entrepreneurship curricula, and there are more than 90 active university-based centers of entrepreneurship in the United States.[38]

Entrepreneurship education, however, isn't common at the primary and secondary levels. Recently, the National Council on Economic Education found that Americans as a whole lack a strong understanding of basic economics.[39] Adults scored an average 57 percent and high school students scored an average 48 percent on a test of basic economics. The National Council on Economic Education attributes these poor results to a lack of basic economic education in the primary and secondary levels. The situation has even greater implications for the teaching of complex entrepreneurship skills, such as opportunity recognition, marshaling resources in pursuit of opportunity and mastering long-term vision.

These shortcomings are widely recognized and several organizations have tried to fill the gap. More than 200,000 children across the country have participated in Mini-Society® in the past five years.[40] Mini-Society® is one of the programs designed by the Kauffman Center for Entrepreneurial Leadership to teach entrepreneurship to elementary and secondary school children. The program is an experienced-based approach directed at children ages 8 to 12. Through Mini-Society®, children design and develop their own society and identify tasks for which they can earn money. Ultimately, the children identify opportunities and establish their own businesses to provide goods and services to their fellow citizens. Throughout the 10-week program, the instructor or course leader conducts in-depth debriefings with each student to introduce and explain the concepts

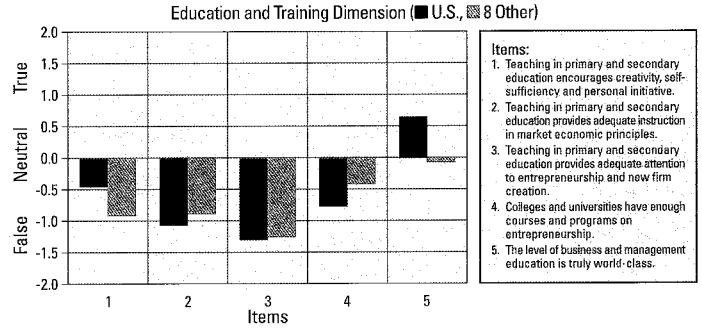
underlying the learning experiences. More than 3,500 teachers and youth leaders across the country have been trained to teach Mini-Society®.

National Foundation for Teaching Entrepreneurship (NFTE) has designed programs (e.g., summer camps) to teach low-income teens how to start their own businesses.[41] To date, 23,000 students have volunteered for NFTE programs, and NFTE expects to serve 9,000 students in 1999.[42] Ninety percent of the students completing NFTE programs report that they are better able to communicate with teachers, parents and peers.

The questionnaire results highlight the perceived weakness in entrepreneurship education at the primary and secondary levels. The key informants question whether there is adequate instruction in basic economic markets in general (Item 2 in Figure 9), and whether there is adequate instruction in entrepreneurship specifically (Item 3). The key informants were mixed as to how well primary and secondary education instilled self-reliance (Item 1). Somewhat surprisingly, many key informants believe that colleges do not offer enough entrepreneurship courses (Item 4), which is most likely in reference to the lack of depth in courses currently being offered. Many colleges teach an introductory entrepreneurship course that focuses on business plan creation. Often, this is the only entrepreneurship course taught. Relatively few colleges offer more than three or four courses. The U.S. key informants are, however, very positive — relative to their counterparts in other GEM countries — about the quality of the general management education provided by U.S. educational institutions (Item 5).

In general, the key informants view college level entrepreneurship courses as a strength (few discussed whether the course offerings were sufficient as highlighted in

Figure 9
Education and Training Questionnaire Items: U.S. vs. GEM Countries



Item 4 on page 23). However, the rapid growth in colleges offering the curricula has created a potential problem with the quality of instructors. Many colleges rely on adjunct professors (40 percent of all entrepreneurship courses taught). Although adjunct professors often bring more current real-life entrepreneurial experience to the classroom, they may not be as prepared in pedagogical methods. Likewise, relatively few Ph.D.-granting institutions offer degrees in entrepreneurship.

Another concern revolves around technical and engineering training. Two items are of particular importance; getting more people to study technical topics and the lack of entrepreneurship training for engineering and technical students. Technology innovations provide plentiful opportunities for future economic growth, but several key informants fear that the United States is not training enough people in the skills needed to bring these innovations to market. In universities throughout the United States, entrepreneurship education is predominantly located in the business schools. As such, engineering and other technical students aren't being adequately exposed to entrepreneurship fundamentals. There are a few programs, more recently formed, that are attempting to bridge the gulf between the science and business communities (e.g., Stanford University, University of Chicago, University of Colorado-Boulder, University of Iowa, University of Texas-Austin, etc.). Such programs will serve as future role models for encouraging the integration of entrepreneurship and technical skills-based education.

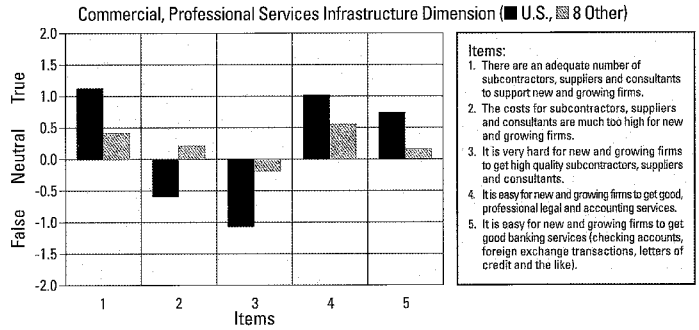
Commercial and Professional Infrastructure

Accompanying the burgeoning entrepreneurial economy in the United States is the well established commercial and professional supporting infrastructure. In fact, most of the key informants across all the GEM countries felt that their commercial and professional infrastructures (including subcontractors, lawyers and accountants) were strong, with the exception of Japan and France (see Figure 4). In the United States, all of the "big five" accounting firms have established small business practices. Attracting and working with growing firms seems to be a major source of new clients. To attract prospective growth firms, many commercial providers offer deferred fees, reduced fees or will accept equity in lieu of fees. Not only do reduced fees/deferred fees build up the provider's business, but they also increase the chances that resource-constrained start-ups will access the services.

A significant majority of all the key informants agreed that there was an adequate supply of commercial and professional providers (Item 1 in Figure 10). This is one of the strongest responses in the entire survey. The key informants also believed that professional provider fees weren't excessive (Item 2), and that it was not difficult to find quality providers (Item 3). The key informants also agreed that the quality of legal advice (Item 4) and banking services were strong (Item 5). In sum, one of the major indicators that the U.S. economic structure is organized to accept and support new and growing firms is the availability of adequate, affordable, quality professional and banking services.

Although respondents nationwide generally had a favorable impression of commercial providers, those in the Midwest felt that commercial providers in that region were not as creative in structuring relationships with entrepreneurs. It appears that commercial provider interaction with

Figure 10
Commercial and Professional Infrastructure Questionnaire Items:
U.S. vs. GEM Countries



start-ups affects the ability to grow a new firm. Providers in entrepreneurial "hot spots" such as the Silicon Valley and Boston's Route 128 have substantial experience with start-ups and, thus, are generally more sophisticated in structuring these relationships.

Government Policies and Programs

U.S. key informants generally believe that an entrepreneur's decision to start a new venture is not affected by whether government policies and programs are supportive of that decision. This conclusion is consistent across the 10 GEM countries. However, key informants do suggest that government policies and programs may impact the likelihood of success of new ventures. As such, our review of these items has significant policy implications.

Perhaps the most striking conclusion to be drawn from the key informant interviews regarding the role of government policies and programs is the perception that such initiatives only marginally impact the rate of new venture start-ups, if at all. Programs and policies affecting the U.S. entrepreneurial sector are derived from three different levels of government: federal, state and local. The primary policy concerns are tax policies and business regulations. The primary concerns regarding governmental programs are the degree of redundancy across programs and how difficult it is to know when one qualifies for a particular program.

In general, the key informants view U.S. taxes and regulations as predictable and neutral toward small and large firms. Several key informants noted that the regulation environment in the United States relies on punitive remedies rather than incentives to meet and exceed guidelines. Moreover, compliance on these regulations is measured in quantitative terms that

encourage minimal compliance. Compliance with various regulations and tax laws is considered to be labor intensive. In 1992, it was estimated that regulatory compliance cost small firms approximately $5,000 per employee, versus $500 to $3,400 for larger firms.[43]

With respect to government programs, key informants felt that locating the most appropriate program was difficult and time consuming. It appears that many entrepreneurs are unaware of the programs available or how to find them. For example, Wisconsin has at least 400 programs providing 700 different services for small business, but overall awareness of this assistance is low.[44] A perusal of programs in Massachusetts confirms the Wisconsin findings. Many key informants also noted that there has been little or no research into the effectiveness of government programs. As a result, programs are funded indefinitely, even as new programs with similar services are initiated. The inevitable proliferation of programs diminishes government efficiency. Many of the key informants felt that a more rigorous evaluation of the effectiveness of government programs would be a useful step in eliminating such redundancy.

There have been efforts to explore the impact of contact with assistance programs. In general, the evidence suggests that those start-ups that make contact with such programs are more likely to implement a new business, and that new businesses that make contact for assistance have a higher survival rate and tend to report more growth. Indeed, when nascent entrepreneurs and owners of new businesses report on their experiences, they are uniformly positive and complimentary about the assistance.[45] In essence, the major problem appears to be one of marketing, rather than delivery of services. If properly promoted, however, the demand for services would substantially increase.

ENTREPRENEURIAL OPPORTUNITIES AND CAPACITY

The social, cultural and political context, the general national framework conditions and the entrepreneurial national framework conditions are all assumed to have an impact on the national entrepreneurial sector. In turn, the national entrepreneurial sector is considered to have several major features: the perception of opportunity, the presence of entrepreneurial capacity and the motivation to pursue a new firm start-up. All three must be present before a viable effort to launch a new firm can begin. Two types of information are used to assess these three aspects of the entrepreneurial sector: the judgements of the key informants in each country and selected items from the adult population surveys.

A summary of these comparisons for the 10 GEM countries is provided in Table 3. Most Americans believe that "there will be good opportunities for starting a business in the next six months," are motivated to do so and are more capable than people from other GEM nations (see Table 3). The top row of Table 3 gives the survey-based start-up rates for each GEM country. The next five rows show how opportunities are perceived from both the general population survey and the national panels of key informant, the perceived entrepreneurial capacity (key informants only), perceived motivation to start an entrepreneurial venture (key informants only) and respect for entrepreneurs (general population sample only). Measures for the general population sample are in percentages related to each item (i.e., percent agree or disagree). The key informant index values are standardized across the participating countries so that each country is measured in terms of standard deviation units from the mean (or average). High positive standard deviations, greater than 1.0, indicate that a country is well above average in the category; a negative figure less than –1.0, would indicate well below average.

As can be seen from Table 3, Americans are far more likely than their counterparts in other countries to perceive opportunities

Table 3
Perceived Opportunities and Motivation to Pursue Entrepreneurial Opportunities

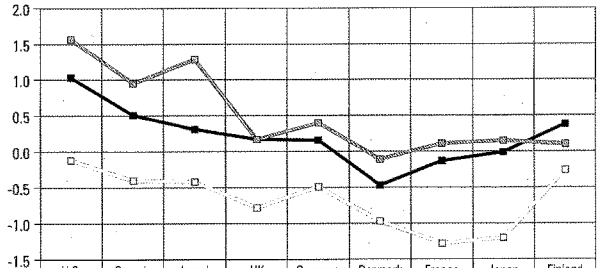
	Correlation with Start-Up Rates	U.S.	Canada	Israel	Italy	UK	Germany	Denmark	France	Japan	Finland
Business Start-Up Rate Prevalence: %	—	8.4	6.8	5.4	3.4	3.3	2.2	2.0	1.8	1.6	1.4
Opportunity, Perceived: Key Informant Index	0.80	1.9	0.7	0.2	—	-0.1	1.1	-1.6	-0.8	-0.5	0.4
Opportunity, Perceived: Survey Respond: %	0.84	57.0	37.0	28.0	25.0	16.0	15.0	27.0	15.0	1.0	18.0
Entrepreneurial Capacity: Key Informant Index	0.89	1.3	0.6	0.6	—	-0.3	0.4	-0.7	-1.5	-1.3	1.0
Entrepreneurial Motivation: Key Informant Index	0.93	1.8	0.7	1.3	—	-0.6	-0.2	-1.0	-0.6	-0.6	-0.7
Respect for Start-Ups: Survey Respond: %	0.45	91.0	86.0	65.0	68.0	39.0	73.0	85.0	83.0	8.0	57.0

for entrepreneurial ventures. Fifty-seven percent of Americans perceive good opportunities, which is significantly higher than any other country. Likewise, the U.S. key informants perceive far more opportunities than did their peers in other countries (Index value of 1.9). Figure 11 graphically illustrates how the key informants viewed entrepreneurial opportunities. A closer look at the key informant responses reveals that they perceive more opportunities than there are people to take advantage of them, including many opportunities for creating high-growth firms.

Entrepreneurial capacity is composed of two dimensions: the motivation to start a new business and the skills to do so. Results from the U.S. study were mixed on this measure. Based on the results of the population survey, adults in the United States appear highly motivated to start new businesses. When asked if their family and friends would pursue opportunities to start a new business if such opportunities existed, 56 percent (or 1.8 on the Entrepreneurial Motivation Index) of the key informants thought they would. This is significantly higher than any other participating country (see Table 3 and Figure 11).

There was some question, however, as to the overall level of competency in the population for pursuing such opportunities. The key informants generally believe that aspiring entrepreneurs could be better trained in the start-up process. This is particularly evident when and where there are opportunities to create high-growth firms. The experts argue that a more highly trained class of aspiring entrepreneurs would accelerate the rate of entrepreneurship in America by reducing the number of failures, improving the overall efficiency of established firms and providing for a larger number of growth-oriented firms.

Figure 11
Perceived Opportunities, Capacity and Motivation Indices: Cross-National Comparisons



	U.S.	Canada	Israel	UK	Germany	Denmark	France	Japan	Finland
Perceived	1.03	0.51	0.31	0.17	0.16	-0.47	-0.13	-0.01	0.38
Capacity	-0.12	-0.4	-0.42	-0.78	-0.49	-0.97	-1.28	-1.2	-0.26
Motivation	1.57	0.95	1.28	0.17	0.4	-0.11	0.11	0.15	0.1

REGIONAL DIVERSITY

Earlier research, not specifically related to the GEM initiative, indicates a substantial geographic variation across 382 U.S. labor market areas in business start-up activity. The degree of diversity is presented in Table 4, where start-up activity is presented for all firms and for manufacturing firms only. The annual rate of start-ups is presented in two ways: in proportion to 100 existing firms and to 10,000 people in the population. As seen in Table 4, annual firm births ranges from four to 11 per 100 existing firms and 18 to 78 per 10,000 individuals, leading to high/low ratios of 3-to-1 and 4-to-1. These ranges are much greater among manufacturing firm births, as some U.S. labor market areas in sparse rural locations have virtually no manufacturing activity.

Systematic research on the differences between U.S. labor markets that are high and low in entrepreneurial activity suggests that the major factors are growth in demand (reflected in population growth, growth in disposable income, or low unemployment), diversity of the economic structure, presence of mid-career adults and greater flexibility in employment relationships. Because analysis involved 382 labor market areas and temporal comparisons over a number of time periods, it was possible to control for the relative impact of a number of factors. Regional variation associated with higher densities of customers, suppliers, workers, R&D resources, costs of production or access to national transportation facilities had **little** systematic impact on firm birth rates.

Basically, the major urban areas were the primary settings for higher levels of firm creation, while rural areas — many with declining populations — were most likely to have reduced levels of start-up activity.[46] The regional comparisons were extremely stable over time, as there was very little change in the relative position of the geographic regions in terms of the major causal factors over several decades.

The Emergence of Regional Sector Specialization: Industrial Districts

In addition to the general regional patterns, some regions develop an expertise in a specific type of commercial activity, producing a sustained regional advantage for that type of work. Once this specialization becomes apparent, considerable expertise and specialized

Table 4
Regional Variations in U.S. Firm Births: 1986–88

Data for 382 Labor Market Areas	Average	Maximum	Minimum	Ratio
New Firms/100 Existing				
All Economic Sectors	6.9	11.0	3.9	2.8
Manufacturing only	6.0	14.2	2.1	6.8
New Firms/10,000 Human Population				
All Economic Sectors	33.0	74.0	18.0	4.1
Manufacturing Only	126.8	114.0	2.4	47.5

Reynolds, Paul D., David J. Storey, and Paul Westhead. 1994. Cross-national Comparisons of the Variation in New Firm Formation Rates. Regional Studies 28:4): pg 449. Table 1.

commercial and government infrastructures often develop in relation to a unique market or economic sector. The best known are based on high technology — Silicon Valley in California, Route 128 in Massachusetts, Research Triangle in North Carolina. The same basic factors appear for other types of activities in other areas — telemarketing and phone interviewing in Omaha, Nebraska, health care in Philadelphia, movie and TV production in Los Angeles, financial markets in New York City and, just recently, software development in Redmond, Washington.

In such settings, technology transfer or diffusion of innovation mechanisms may emerge, many through informal and personal networks often associated with major research institutions or informal networks that develop among technical specialists (e.g., trading success stories in the local restaurants on Friday nights). This will complement other features that may develop, such as a talented flexible pool of specialized workers and professionals, a mass of similarly oriented entrepreneurial companies that may provide complementary products and services, individuals and institutions to provide financial support (risk capital, equity, debt), and a well-developed commercial and physical support infrastructure. The resulting system becomes a burgeoning source of innovation and advancement in this particular economic subsector.

During periods of sector expansion, some hyper-growth firms and highly visible entrepreneurs are evident. Once a geographic cluster gains critical mass in terms of the level of entrepreneurial activity and (e.g., Silicon Valley) markets continue to expand, the result is a competitive advantage that is hard for other regions, even within the United States, to challenge. During periods of rapid market expansion, the *present rate* of new start-ups in a specialized region will be a good predictor, perhaps the best predictor, of rates of new firm start-ups in the immediate future.

Despite the obvious appeal of such "industrial districts" as sources of economic growth and, for the successful firms, wealth creation, no one has figured out how to create such an activity. They are easy to study, as those directly involved are eager to share experiences, but no obvious steps to initiate the development have been discovered. Governments may, however, be prepared to facilitate the growth of such regional specialization when the first signs begin to appear. This can facilitate the emergence of sustained regional competitive advantages and, in some cases, sustained national competitive advantages.

IMPLICATIONS FOR THE U.S. ENTREPRENEURIAL ECONOMY

The major implications from the cross-national comparison of the 10 GEM countries are clear. A country's rate of economic development is critically linked to the level of entrepreneurial activity. The level of this entrepreneurial activity reflects both the perception of the availability of opportunities for new ventures and the public's motivation and skill to pursue them.

Systematic Advantages

The United States has a number of major advantages that facilitate continuation of an entrepreneurial economy.

- Anticipation of sustained population growth over the next 25 years.
- Relative high level of women participating in firm start-ups.
- A substantial proportion of the work population in the prime "entrepreneurial years."
- High level of income diversity, with a substantial proportion of wealthy households.
- Widespread political and social acceptance of the existing income diversity.
- A substantial, sophisticated and well established post-secondary educational system.
- National acceptance of a vigorous, extensive entrepreneurial sector as a fundamental feature of national economic life.
- Acceptance of entrepreneurship career options as appropriate and acceptable for those who wish to pursue them.
- Widespread inclination to identify opportunities, along with the capacity and motivation to pursue them.

The major implication of the foregoing analysis is that, compared to other GEM countries, the U.S. entrepreneurial sector is in very good shape. The major focus should therefore be on maintaining these systemic advantages. For example, a major reduction in the scope or magnitude of the post-high school (secondary or tertiary) educational and training systems could have a major negative effect, as would changes in legislation or policies that would reduce the proportion of women involved in entrepreneurial ventures. Assuming such changes are very unlikely, what other implications might be justified? Some comments are possible about adjustments that may facilitate smoother working and an overall enhancement of the existing system.

Enhancing the System

The perception of entrepreneurial opportunities and the capacity to exploit them are strongly associated with social norms that encourage venturing, such as the availability of risk capital, access to developing technologies, a quality diverse entrepreneurship education system and a sound professional infrastructure. These findings have considerable implications for the U.S. entrepreneurial economy.

Expand Education and Training: Entrepreneurship education, at all levels, could very effectively prepare and train students to start and manage new businesses. Entrepreneurship education is strong and getting stronger in business schools across the country, but it needs to proliferate outside of the business domain. Among those 25-34 years old, 87 percent have completed high school, 56 percent have completed some form of post-high school training, 27 percent completed college and 6 percent post-college experiences.[47] Only 16 percent, however, of college students major in business subjects.[48] And not every

business school student is required to or elects to take an entrepreneurship course. Thus the number of people exposed to higher-level entrepreneurship education is relatively small in the United States. Therefore, it is critical that entrepreneurship education be expanded. Major areas identified in the key informant interviews included the engineering and technology schools within our universities and the primary and secondary levels.

Engineering and other technology graduates have the capability to generate innovations that may be the basis for high-growth firms. They need to learn techniques for discerning whether or not such innovations have commercial potential. As such, universities need to encourage the integration of their degree requirements between entrepreneurship/management and engineering/technology. There are often many hurdles to such collaboration, however, including issues of funding, credit allocations, faculty teaching loads, scheduling conflicts and the lack of available facilities. While a handful of schools are facing and overcoming these issues, there is a real need to see more active collaboration on our university campuses.

Although programs such as those sponsored by the Kauffman Center and NFTE are quite successful, there needs to be a more concentrated effort to introduce entrepreneurship and basic economic principals at the primary and secondary levels. At the primary level, these concepts could be integrated throughout the curriculum. At the secondary level, entrepreneurship skills and basic economic principles could be offered as stand-alone courses. Many people enter the workforce without a college education and have no possibility for exposure to entrepreneurship training.

While not every high school graduate has the capacity or desire for higher education, almost everybody has the potential to start a new business. The average high school graduate may not start a fast-growth, high-technology company, but he or she can start a landscaping business, a retail business or some other venture that will employ other people and contribute to economic adaptation. As such, it is critical to provide at least the basic instruction to insure that these future entrepreneurs have the understanding of and a certain level of proficiency in the skills necessary to implement and manage a business.

Government Assistance Programs: Numerous governmental programs at all levels have been designed with the entrepreneur in mind. However, many key informants believe that a great number of these programs compete with each other, which leads to as much confusion as assistance. Duplication not only diminishes the impact that these dollars could have, but also makes it difficult for the entrepreneur to know which program best addresses his specific need. Recognizing the seriousness of the matter, various national experts recommended the establishment of a "clearinghouse" for government programs. A clearinghouse, perhaps Web-based, could provide an efficient means for entrepreneurs to gain knowledge of specific programs and to access those programs.

Another dominant theme in the key informant interviews was the need to simplify compliance pressures on entrepreneurial firms. Simplifying compliance requirements would improve entrepreneurial efficiency at the most critical times in the venture's life. Many new ventures report having a difficult time staying on top of all the reporting

requirements. Key informants agree that further efforts to reduce the required paperwork would reduce manpower constraints on new ventures, thereby increasing their chances of surviving the early years.

Responding to Structural Shifts: All business activity in the United States occurs within an institution context that includes the education and legal systems as well as the government policies and regulations that impinge on all. While it is virtually impossible to predict major shifts in the economic base of a given geographic region, or the nation as a whole, there are reasons to expect institutions to be poised to adapt to major shifts in the economic structure. This can be in terms of developing new regulations, providing infrastructure or adapting existing procedures to facilitate business activity.

One of the major advantages of a substantial entrepreneurial sector is the capacity to adapt and adjust to new procedures, new demands and new competition. Unnecessary delays and complications among societal institutions can do much to mitigate this advantage if the capacity for adjustment is hampered.

This problem could be of particular relevance to a local region or community where resources to provide adjustments may be scarce. In such cases, state or federal government programs may do much to facilitate the necessary local adaptation by providing new educational programs, infrastructure or assistance with regulatory and policy change.

The "Gap" in Seed Stage Financing: One of the more prominent problems identified by the key informants was the apparent gap in the availability of seed stage capital. However, key informants were in disagreement as to whether there really is a gap or not. Several explanations for this apparent contradiction were provided. First, if the gap exists, it may be more pronounced in different industries (i.e., high tech versus low tech), different geographic regions (i.e., Silicon Valley versus the Midwest), or for distinct groups of entrepreneurs (i.e., minorities and women). The substantial amount of funding provided through informal channels, orders of magnitude greater than that provided by formal venture capital investments and heretofore unknown and unappreciated, suggests some mechanisms for filling the gap may have developed without recognition.

Second, there may not be a gap in the availability of such capital, but, rather, in the entrepreneur's knowledge of where it resides and how to tap it. This would open the door to more systematic program solutions, rather than needing to shift the underlying investment philosophy of the entrepreneurial sector. Finally, the experts may be split over whether a gap exists in seed capital because of the fact that many entrepreneurs choose not to endure the time, cost and bureaucracy involved in the search and seizure of such capital. Like most financing rounds involving outside sources, the process of identifying and securing seed funding greatly strains the entrepreneur's time and resources.

Successful Role Models: Power in the Story: In today's media (newspapers, periodicals, television programs, etc.), numerous stories are told about successful entrepreneurial endeavors. However, regions wishing to improve their entrepreneurial sector probably can foster more recognition and visibility for their local entrepreneurial role models. Ernst & Young's Entrepreneur Of The Year® program recognizes national entrepreneur winners and also celebrates winners in 47 regions across the country. States, cities and

other localities wishing to increase the level of entrepreneurial activity in their area could create similar ways to recognize and celebrate their entrepreneurs. Increasing the visibility of entrepreneurs by telling their story could prove to be an attractive way to encourage others to pursue their own entrepreneurial opportunities. It reflects widespread acceptance of entrepreneurship as a career option in the United States.

Understanding the Entrepreneurial Process

It is clear that entrepreneurship has a major role in modern market economies. As the pace of change and adaptation increases in the global economy, an understanding of the mechanisms associated with the implementation of new firms and their growth trajectory become even more important. The United States, in some ways, has been complacent. Even now, as reviewed above, there is no accurate national count of new and growing firms.

The lack of comprehensive data means there is no reliable source for measuring the impact of and response to policy issues as they arise. As a result, policy decisions regarding entrepreneurship are often made in a vacuum, without knowledge of the full impact of the decisions.[49]

Given the extent to which entrepreneurial career options are an integral feature of work life in the United States, it is astonishing that a more comprehensive research program has not been initiated. This is not the case in Europe, where substantial public funds are supporting major research programs on the start-up process itself as well as the role of entrepreneurship in national economic growth. Many of the GEM national teams receive financial support from national government agencies. In the absence of a more comprehensive, long-term research program on the entrepreneurial process, federal and state policies regarding new and growth firms will continue to fluctuate in reaction to political whims and pressures from special interest groups.

CONCLUSION

The United States is well positioned for the future. The country has a high start-up rate, a robust entrepreneurial sector and the most critical background factors are well established. People perceive opportunities and are motivated to pursue entrepreneurial careers, which not only improves the overall economy but also provides social mobility for the entrepreneur. This research suggests that as much as one third of the variation in national economic growth may be attributable to variation in entrepreneurial activity. Moreover, other countries continue to strive to improve their entrepreneurial sectors. Considering the importance of a strong entrepreneurial sector and the fact that other countries are moving ahead to improve, it is critical that the United States not rest on its laurels. How can entrepreneurial activity be improved?

Launching a business takes knowledge. One of the areas that might have the greatest impact on entrepreneurial activity is increasing the proliferation of entrepreneurship education outside of its traditional domain of the business college. Specifically, increased entrepreneurship education at the primary and secondary levels, as well as at technical and engineering schools might create a whole new generation of entrepreneurs.

Changes in government policies and programs might facilitate entrepreneurship at the margins. Specifically, simplifying regulation and tax reporting requirements would diminish the disproportionate resource drain on constrained new ventures. Creating a clearinghouse detailing government programs might help bridge the seed and start-up financing gap, especially if these programs can be targeted to those geographic areas, industries and demographic groups where the gap is most pronounced.

Systematic federal efforts to provide accurate, timely measures of new and growth firms and an ongoing assessment of the national entrepreneurial process would do much to enhance understanding of this important activity and may prevent major policy errors or oversights.

Entrepreneurship is critical to the nation's economic well-being. It is hoped that this report provides a basis to ensure its continued vigor.

REFERENCES

Acs, Z., & Armington, C. 1998. Longitudinal establishment and enterprise microdata (LEEM) documentation. Washington, D.C.: Center for Economic Studies Discussion Paper 98-9 (July).

Acs, Z.J. & Phillips, B. 1997. "Why Does the Relative Share of Employment Stay Constant?" Reynolds, Paul D., et al (Eds). *Frontiers of Entrepreneurship Research: 1997*. Wellesley, MA: Babson College.

Anonymous. 1998. Defining tech transfer. *Texas Business Review*, June: 4.

Armington, Catherine. "Statistics of U.S. Business Micro Data and Tables: Data on Establishments by Firm Size," U.S. Small Business Administration: Office of Advocacy, 4 June 1998.

Birch, D.L. 1987. *Job Creation in America*. N.Y: Free Press.

Birch, D.L. 1981. Who Creates Jobs? *The Public Interest*, 65: 3-14.

Birch, David L., Anne Haggerty, and William Parsons. 1997. Corporate Demographics: Corporate Almanac. Cambridgepark, MA: Cognetics, Inc.

Brenner, L. (1999) What we need to know about money. *Parade Magazine*, April 18: 4-7.

Bygrave, W., & Timmons, J. 1992. *Venture Capital at the Crossroads*, Cambridge, MA: Harvard Business School Press.

Dennis, William J., Jr. 1996 *Small business problems and priorities*, NFIB Foundation, Washington, D.C.

Dennis, William J., Jr. 1999. Research Mimicking Policy: Entrepreneurial/Small Business Policy Research in the United States. International State of the Art in Entrepreneurship Research Conference. Fort Lauderdale, FL; February, 1999.

Evans, J. 1998. The search for the perfect gift horse *Latin Finance*, 97: 23.

Kauffman Center for Entrepreneurial Leadership, 1999. www.entreworld.org

Kunkel, S., & Hofer, C., 1991. Why study the determinants of new venture performance: A literature review and rationale. *Presented at Academy of Management meetings*.

Massachusetts Office of Business Development, 1999. www.magnet.state.ma.us/mobd/

McKinsey & Company. 1998. United StatesVenture Capital — Industry Overview and Economics: Summary Document. (September, 1998).

National Federation for Teaching Entrepreneurship, 1999. www.NFTE.com

OECD, 1998. *Fostering Entrepreneurship*. Paris: OECD Documents.

OECD. 1996. SMES: *Employment, Innovation, and Growth: The Washington Workshop*. Paris: OECD Documents.

Reynolds, P.D. 1997. National Panel Studies of Business Start-Ups: Research Program Status Report and Policy Implications. Seoul, Republic of Korea: Presentation to the OECD Working Paper on Small and Medium Enterprises.

Reynolds, P.D. 1997. Who starts new firms? — Preliminary explorations of firms-in-gestation. *Small Business Economics*, Vol. 9.

Reynolds, Paul D. 1999. Creative Destruction: Source of Symptom of Economic Growth? in Acs, Z. et al (eds): Entrepreneurship, Small and Medium-Enterprises and the Macroeconomy. Cambridge, UK: Cambridge U Press, Pg 97-136.

Reynolds, Paul D., Brenda Miller, and Wilbur Maki. 1994. Explaining Regional Variation in Business Births and Deaths: United States 1976-88. *Small Business Economics* 7: 389-407.

Reynolds, P., Storey, D., & Westhead, P. 1994. Cross-national comparisons of variation in new firm formation rates. *Regional Studies*, Vol. 28(4): 443-456.

Reynolds, Paul D. and Sammis White. 1998. *The Entrepreneurial Process*, Greenwich, CT: Quorum.

Small Business Administration, 1999. www.sbaonline.sba.gov/aboutsba/

Small Business Administration, 1997. *The State of Small Business: A Report of the President, 1996*.

Small Business Sourcebook, Twelfth edition, 1999, Vol. 2: pp. 3103 -3112.

Schreyer. P. 1996. SMEs and Employment Creation: Overview of Selected Quantitative Studies in OECD Member Countries. OECD: STI Working Papers 1996/4.

Schwab, K. and J. Sachs. *The Global Competitiveness Report: 1997*. Geneva, Switzerland: World Economic Forum, 1997.

Schwab, K. and J. Sachs. *The Global Competitiveness Report: 1998*. Geneva, Switzerland: World Economic Forum, 1998.

Storey, D.J. 1994. *Understanding the Small Business Sector*. London: Routledge.

Timmons, J. 1999. *New Venture Creation*. Boston, Irwin McGraw-Hill.

U.S. Census Bureau, *Statistical Abstract of the United States:* 1998. October 8, 1998.

Venture Economics Investor Service: 1997. *National Venture Capital Association Annual Report*.

World Bank: 1998. World Development Indicators: 1998. Washington, D.C.: World Bank.

ENDNOTES

[1]Timmons, J. 1999. *New Venture Creation*. Boston, Irwin McGraw-Hill.

[2]Birch, David. 1981. "Who Creates Jobs?" The Public Interest. 65:3-14 summarizes the original analysis. Schreyer, Paul. 1996. "SMEs and Employment Creation: Overview of Selected Quantitative Studies in OECD Member Countries." OECD: STI Working Papers 1996/4, provides an analysis of 11 OECD member countries. Acs, Zoltan J. and Phillips, Bruce. 1997. "Why Does the Relative Share of Employment Stay Constant?" Reynolds, Paul D., et al (Eds). Frontiers of Entrepreneurship Research: 1997. Wellesley, MA: Babson College provides evidence related to current sources of net and gross jobs in the United States.

[3]Armington, Catherine. "Statistics of U.S. Business Micro Data and Tables: Data on Establishments by Firm Size," U.S. Small Business Administration: Office of Advocacy, 4 June 1998.

[4]Small Business Administration, 1999. www.sbaonline.sba.gov/aboutsba/

[5]Ibid.

[6]Birch, David L. 1987. Job Creation in America. N.Y: Free Press and Storey, David J. 1994. Understanding the Small Business Sector. London: Routledge.

[7]Timmons, J. 1999.

[8]OECD, 1998. Fostering Entrepreneurship.

[9]Small Business Administration, 1999.

[10]OECD. 1996. "SMES: Employment, Innovation, and Growth: The Washington Workshop." Paris, France: OECD Documents.

[11]Reynolds, Paul D. 1997. "National Panel Studies of Business Start-Ups: Research Program Status Report and Policy Implications." Seoul, Republic of Korea: Presentation to the OECD Working Paper on Small and Medium Enterprises.

[12]Reynolds, Paul D. & White, Sammis. 1998. *The Entrepreneurial Process*, Greenwich, CT: Quorum, pg. 5.

[13]Reynolds, Paul D. 1999. Creative Destruction: Source of Symptom of Economic Growth? in Acs, Z. et al (Eds): Entrepreneurship, Small and Medium-Enterprises and the Macroeconomy. Cambridge, UK: Cambridge U Press, pp. 97-136.

[14]This estimate is based on 8.4 percent of a representative sample of U.S. adults interviewed in March 1999 by Market Facts, Inc. of Arlington Heights, IL. Previous research has suggested that an average of 2.2 adults are involved in each start-up, reducing this figure to 3.8 percent, or 7,308,684 among the 191,417,914 in the United States that are 18 years or older.

[15]However, a new incorporation may never become an operating business and the majority of new businesses are not legal corporations.

[16]These are produced annually as part of a Corporate Demographic series. The principal owner/manager of the firm is David Birch, the first person to develop the procedures that made these estimates possible.

[17]Acs, Z., & Armington, C. 1998. Longitudinal establishment and enterprise microdata (LEEM) documentation. Washington, D.C.: Center for Economic Studies Discussion Paper 98-9 (July).

[18]OECD, 1998.

[19]Ibid.

[20]By start-up, we mean participation in new and small firm sector as measured in the adult population surveys. Respondents considered to be active in start-ups met the following criteria: (1) they expected to own all or part of the new firm, (2) they had been active in initiating the start-up in the past 12 months, and (3) the firm had not paid salaries or wages for more than three months.

[21]Finland is not included in this measure because its largest company, Nokia, accounts for 18 percent of Finnish exports and 25 percent of all Finnish economic growth. Thus, it skews the results if included.

[22]Japan is excluded from this measure because despite its currently low growth rate, it still has one of the lowest unemployment rates (4.4 percent).

[23]Again, Finland is not included because of the unduly large impact of Nokia.

[24]Again, Japan is not included because of its low unemployment rate.

[25]Population data for all 10 countries were taken from U.S. Census, International Data Base, Washington, D.C. (www.census.gov/ftp/pub/ipc/www/idbnew.html).

[26]Population data for all 10 countries were taken from U.S. Census, International Data Base, Washington, D.C. (www.census.gov/ftp/pub/ipc/www/idbnew.html).

[27]World Bank: 1998. World Development Indicators: 1998. Washington, D.C.: World Bank.

[28]World Bank: 1998. World Development Indicators: 1998. Washington, D.C.: World Bank.

[29]Schwab, K. and Sachs, J. *The Global Competitiveness Report:* 1997. Geneva, Switzerland: World Economic Forum, 1997. Schwab, K. and Sachs, J. *The Global Competitiveness Report:* 1998. Geneva, Switzerland: World Economic Forum, 1998.

[30]Reynolds, Paul D. and White, Sammis. 1998. *The Entrepreneurial Process*, Greenwich, CT: Quorum, Pg. 117.

[31]OECD, 1998.

[32]The small sample is reflected in the wide range of the 95 percent confidence interval, which is from $24 billion to $100 billion. In other words, if the data collection was repeated 20 times, the average would be in this range for 19 of the 20 samples.

[33]Venture Economics Investor Service: 1997. National Venture Capital Association Annual Report. This figure is skewed due to a small number of megaVCs who have more than $1 billion under management.

[34]Bygrave, W., & Timmons, J. 1992. *Venture Capital at the Crossroads*, Cambridge, MA: Harvard Business School Press.

[35]One of the more recent innovations in angel investing is garage.com, an internet-based network founded by Guy Kawasaki to marry angels and entrepreneurs seeking from $200,000 to $1 million. Another approach is the unified investment group. In 1995, Hans Severiens, along with 120 business executives, formed *"The Band of Angels."* Since then, a number of other angel investment groups have formed across the country and many are having considerable success in making placements.

[36]Kunkel, S., & Hofer, C. 1990. Why study the determinants of new venture performance: A literature review and rationale. *Presented at Academy of Management meetings.*

[37]Anonymous. 1998. Defining tech transfer. *Texas Business Review,* June: 4.

[38]Kauffman Center for Entrepreneurial Leadership. www.entreworld.org

[39]Brenner, L. 1999. What we need to know about money. *Parade Magazine*, April 18.

[40]The Mini-Society© curriculum was created by Dr. Marilyn Kourilsky.

[41]Approximately 70 percent of those completing the NFTE experience a currently pursuing or plan to pursue post-secondary education. Sixty-five percent of NFTE alumni eventually start a business, compared to 2 percent in a comparison group of those that do not volunteer for the experience. NFTE staff believe that better education in economics and entrepreneurship will allow disadvantaged people to become more socially mobile.

[42]www.NFTE.com

[43]OECD, 1998.

[44]OECD, 1998.

[45]Reynolds, Paul D. and White, Sammis. 1998. *The Entrepreneurial Process*, Greenwich, CT: Quorum.

[46]Reynolds, Paul D., Miller, Brenda and Maki, Wilbur. 1994. Explaining Regional Variation in Business Births and Deaths: United States 1976-88. Small Business Economics 7: 389-407. The United States was divided into 382 labor market areas, based on 1980 Census of Population reports of commuting to work patterns. The same basic results were found in a seven-nation comparison (France, Germany, Northern Ireland, Italy, Sweden United Kingdom and the United States) reported in Reynolds, Paul D., Storey, David J. and Westhead, Paul. 1994. "Cross-National Comparisons of the Variation in New Firm Formation Rates." Regional Studies 28(4): pp. 443-456.

[47]U.S. Census Bureau, *Statistical Abstract of the United States:* 1998. October 8, 1998, Table 262.

[48]Ibid.

[49]Dennis, William J., Jr. 1999. Research Mimicking Policy: Entrepreneurial/Small Business Policy Research in the United States. International State of the Art in Entrepreneurship Research Conference. Fort Lauderdale, FL; February, 1999.

For more information on the
GEM United States Entrepreneurship Assessment contact:

Andrew Zacharakis
Babson College
zacharakis@babson.edu
www.babson.edu/entrep

Paul D. Reynolds
Babson College
reynoldspd@babson.edu
www.babson.edu/entrep

William D. Bygrave
Babson College
bygrave@babson.edu
www.babson.edu/entrep

For additional copies of this Executive Report, contact:
www.entreworld.org
888-777-GROW (4769)