

THE LIFE CYCLE OF A MINORITY-OWNED BUSINESS:
IMPLICATIONS FOR THE AMERICAN ECONOMY

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National Bureau of Economic Research*

Prepared for National Minority Enterprise Development (MED) Week 2004 Conference
September 7-10, 2004

Sponsored by the Minority Business Development Agency
Washington, D.C.

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National Director



This study was funded through U.S. Small Business Administration (SBA) Grant No. SBAHQ-03-I-0029 which is funded by the SBA. SBA's funding is not an endorsement of any products, opinions, or services. All SBA funded programs are extended to the public on a non-discriminatory basis.



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Executive Summary

The United States today faces unprecedented demographic changes, the net result of which will be dramatic changes in the size and racial and ethnic composition of the U.S. labor force. In future decades the U.S. labor force will grow much more slowly than in the past, and any growth that is realized will be accounted for entirely by minorities—whose growth, in turn, will be accounted for largely by immigrants. *The success or failure of minority-owned businesses will increasingly drive the success or failure of the overall U.S. economy.* Analysis of the problems and potential of minority-owned businesses requires not just a series of snapshot perspectives but rather a comprehensive framework that follows firms from their beginning to their end. This paper introduces the concept of the life-cycle of a firm and divides a firm’s existence into four phases: birth, adolescence, maturity, and death. We develop a set of questions around each element that should be addressed as we formulate an integrated understanding of the factors affecting success and failure of minority-owned businesses. Many of the existing questions about minority firms can be answered only by research that is able to follow individual firms over time. This life-cycle framework requires new data and new analysis. We propose an agenda for new research, in which minority-business owners and managers must be made full partners.

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Section 1

Setting the Stage: Minorities, Immigration, and the Future of the U.S. Economy

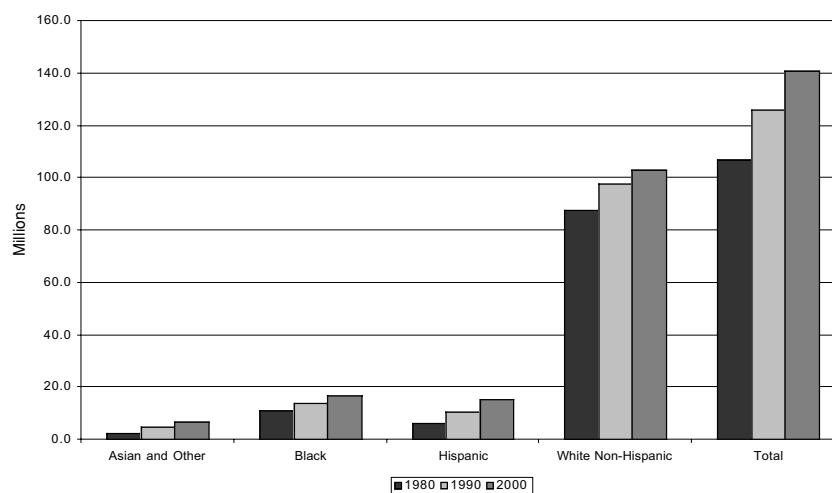
Summary: The United States today faces unprecedented demographic changes, the net result of which will be dramatic changes in the size and racial and ethnic composition of the U.S. labor force. In future decades the U.S. labor force will grow much more slowly than in the past, and any growth that is realized will be accounted for entirely by minorities—whose growth, in turn, will be accounted for largely by immigrants. The success or failure of minority-owned businesses will increasingly drive the success or failure of the overall U.S. economy.

To fully understand the role of minority-owned businesses in the U.S. economy, one must start with the role of minorities more generally in the U.S. labor force. Over the next two generations, the U.S. labor force will dramatically change in terms of size and racial and ethnic composition. Minority-owned businesses will be at the forefront of these changes.

1.1 Minorities in the U.S. Labor Force: The Previous Generation

Figure 1 shows the growth of the U.S. labor force in the previous generation, 1980 to 2000. The total U.S. labor force grew by almost 34 million workers, from 106.9 million in 1980 to 140.8 million in 2000, at an annual rate of 1.6 percent. This growth was distributed widely across both majority and minority groups. Hispanics in the labor force rose by 9.2 million, blacks by 5.7 million, Asians and others by 4.2 million, and white non-Hispanics by 15.4 million.¹

Figure 1
Minorities in the U.S. Labor Force: The Previous Generation



¹ Data in Figures 1 and 2 come from the U.S. Census Bureau as reported in Mitra Toossi, “A Century of Change: the U.S. Labor Force, 1950-2050,” *Monthly Labor Review*, May 2002, pp. 15-28. They cover the civilian non-institutional labor force aged 16 and older. Note that changes for the four racial and ethnic groups indicated in Figure 1 do not sum to the exact national totals. This is because individuals can self-identify as both Hispanic and also a member of a racial group. U.S. Census Bureau population data and projections appear in *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050*, Current Population Reports #P25-1130, 1996, U.S. Government Printing Office, Washington, D.C.

What accounted for the strong and widespread growth in the U.S. labor force in Figure 1? One important force was the labor-force entry of the baby-boom generation. This generation, born between 1946 and 1964, was much larger than the previous or subsequent generations: a total at peak of 76 million individuals. As this generation moved into the labor force, it increased the net size of the labor force because its entering cohorts were larger than the exiting cohorts of the older generation. In the decade of the 1990s, fully 100 percent of this generation fell within the prime-age category of workers aged 25 to 54.

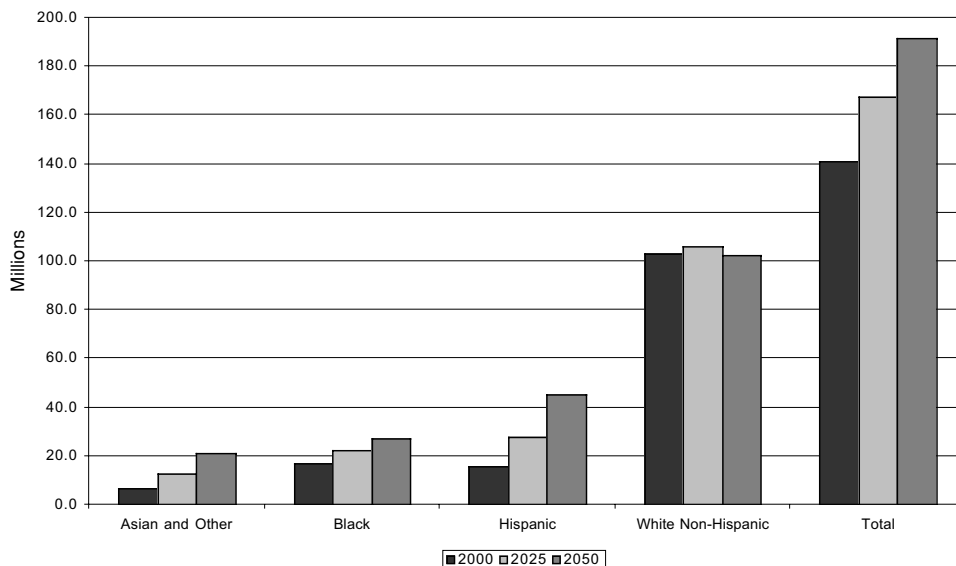
A second important force was rising female labor-force participation rates. The fraction of women in the U.S. labor force rose from barely 1 in 3 in 1950 to over 3 in 5 in 2000. This dramatic rise in female labor-force participation reflected a number of socio-economic forces. It contributed greatly to the rising overall labor supply—and, when combined with rising educational attainment for women, to the rising supply of skilled workers.

The key message of Figure 1 is that the previous generation was a period of a rapidly expanding U.S. labor force on all racial and ethnic fronts. U.S. businesses—both minority- and majority-owned—were operating in an environment of generally expanding pools of available workers at all skill levels.

1.2 Minorities in the U.S. Labor Force: The Future Generations

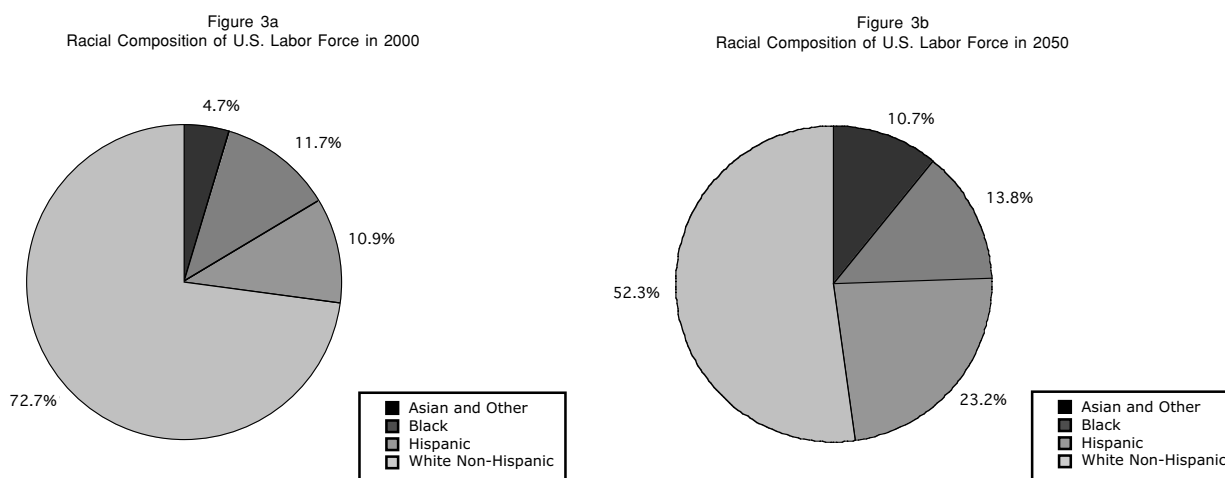
Figure 2 shows the predicted growth of the U.S. labor force in the coming two generations, from 2000 out to 2050. Labor-force projections combine projections of population growth with projections of labor-force participation rates. In turn, population-growth projections rely on assumptions about birth rates, death rates, and—as will be discussed below—immigration. Clearly, forecasting any aspect of the future is prone to error. But labor-force projections have been quite accurate in the past, in part because birth and death rates are relatively predictable.

Figure 2
Minorities in the U.S. Labor Force: The Future Two Generations



One striking fact of Figure 2 is that between now and 2050, 100 percent of the growth in the overall U.S. labor force will be accounted for by minority groups. In 2000 the number of white non-Hispanics in the U.S. labor force was 103 million. As Figure 2 shows, by 2050 that number is projected to fall slightly, to 102.5 million. Over that same period there will be nearly 55 million minorities added to the total labor force: 10.5 million blacks, 14.3 million Asian and other groups, and 30.1 million Hispanics.

There are two important implications of this fact. One is that because no growth will be coming from non-Hispanic whites, the overall U.S. labor force will grow much more slowly in the coming generations. The 1980-2000 growth rate of the overall labor force of 1.6 percent will fall by a full percentage point over 2000 to 2050, to just 0.6 percent per year. The other is that the overall U.S. labor force will become much more diverse. Figure 3 visualizes this: for the years 2000 and 2050, it charts the share of the total U.S. labor force by the four groups in Figures 1 and 2. In 2000 non-Hispanic whites accounted for nearly 3 of every 4 U.S. workers. By 2050 that ratio will be down to barely 1 in 2. Hispanics will go from accounting for about 1 in 10 U.S. workers to about 1 in just 4.



Why will the size and racial and ethnic mix of the U.S. labor force evolve so differently in the coming generations relative to the previous one? A big part of the answer is that the key forces driving growth in the previous generation—baby boom and female participation—will be stopping, if not reversing.

The baby-boom generation is moving through the prime-age working years towards retirement, and the baby-bust generation behind has much smaller cohorts to replace it. In 2004 the oldest baby boomers turned 58, which means that in the next 20-30 years this generation will largely move out of the labor force into retirement. It is widely thought that more baby-boomers will choose to work longer than did the elderly of previous generations—for good reasons (e.g., career satisfaction) as well as bad (e.g., financial necessity). Indeed, the annual growth rate of the overall U.S. labor force of 0.6 percent that is projected for 2000 to 2050 masks a striking age difference. During that time the labor force of those aged 55 and older is expected to grow at an annual rate of 1.4 percent—versus just 0.4 percent for the prime-age segment of those 25 to 54.

The rise in female labor-force participation rates has already slowed dramatically in recent years: from eight and six percentage points in the 1970s and 1980s to less than three percentage points in the 1990s. Going forward, it is projected to plateau and then actually fall back, in part because of retirement of baby-boom females. This rate was 60.2 percent in 2000. It is expected to hit 62.1 percent in 2010, but then fall back to 56.6 percent by 2050.

The key message of Figures 2 and 3 is that the future for the U.S. labor force looks radically different from its past. The overall labor force will grow much more slowly, and any growth that materializes will be accounted for entirely by minority groups. U.S. businesses—both minority- and majority-owned alike—will be operating in a radically different environment of slower-growing and more-diverse pools of workers.

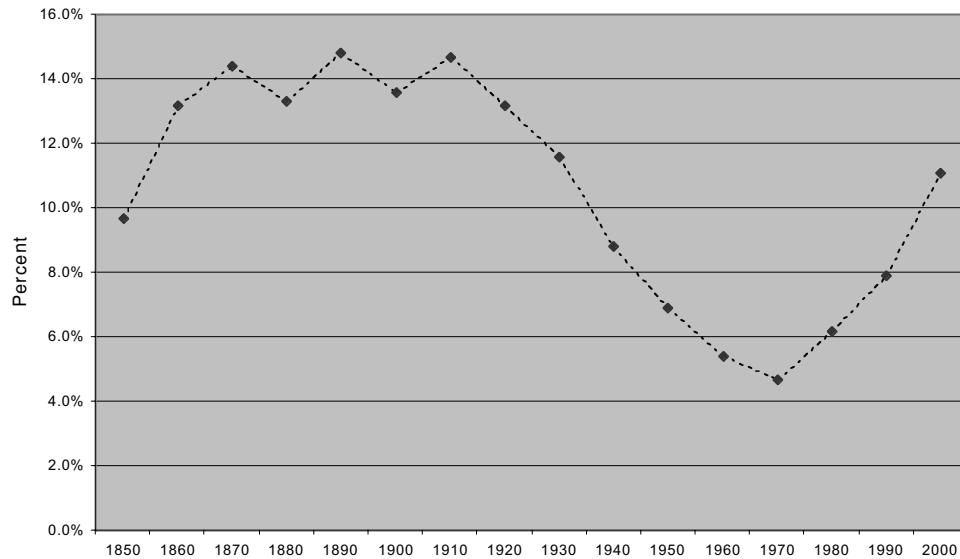
A third important force driving future changes in the U.S. labor force will be immigration. Let us now turn to immigration, and to clarifying the important link between immigration and the overall minority population in the United States.

1.3 Immigration's Contribution to the U.S. Minority Population and Labor Force

Many regard the United States as an immigrant nation, where immigrants are welcomed with open arms by the Statue of Liberty and given an opportunity to pursue the American dream. But what exactly has this meant—and, more importantly, will this mean—for the role of minorities in America?

Figure 4 offers an initial look at this question. Based on data from decennial censuses, from 1850 forward it plots the foreign-born share of the total U.S. population. It suggests three distinct immigration phases in U.S. history. In the postbellum decades up to the early 20th century, immigrant inflows surged such that they reached about 15 percent of all Americans. But starting in the 1910s, the United States restricted its immigration policies on several fronts. The result was a period of declining immigration, such that by 1970 their share of the population had fallen to just 4.7 percent. In the third phase since then, another surge in immigration inflows has raised the foreign-born share to 11.1 percent in 2000.

Figure 4
Foreign-Born Share of U.S. Population



This surge in U.S. immigration since around 1970 has accelerated each decade. Over the 1990s, an average of one million legal immigrants and 300,000 illegal immigrants entered the United States each year. This accounted for 40 percent of the decade's overall population growth.²

The surge in U.S. immigration in recent decades links with the role of minorities in the U.S. labor force and businesses because immigrants are increasingly minorities, not non-minority whites. Changes in U.S. law are widely thought to have contributed to this rising share of immigrants accounted for by minorities. For example, current U.S. policy on illegal immigration is based largely on the Immigration Reform and Control Act of 1986, which made it illegal to employ aliens, mandated monitoring of employers, and expanded border enforcement. This law also offered amnesty to aliens who could establish continuous U.S. residency since 1982. Legal residence was granted to 2.7 million individuals—2 million of whom were Mexican nationals.

The data on the changing ethnic mix of U.S. immigrants are stark. In the 1960s, 48.3 percent of all U.S. immigrants came from either Canada or Europe. During that same decade just 34.0 percent came from Asia and Central/South America. By the 1990s the share of all U.S. immigrants coming from Canada or Europe had fallen to just 13.1 percent—while the Asian/American share had more than doubled, to 69.1 percent.

Looking forward, the best-guess (a.k.a. “middle series”) population projections from the U.S. Census Bureau (1996) foresee the continuation of a very important role for immigration in the future growth of the U.S. population and thus the labor force.

² Growth in the foreign-born population accounted for 33.7% of 1990s U.S. population growth. Births to 1990s immigrants accounted for another 6.5%. For an overview of U.S. immigration in recent decades, see Gordon Hanson, Kenneth F. Scheve, Matthew J. Slaughter, and Antonio Spilimbergo, “Immigration and the U.S. Economy: Labour-Market Impacts, Illegal Entry, and Policy Choices,” in Tito Boeri and Barry McCormick (eds.), *Immigration Policy and the Welfare System*, London, U.K.: Oxford University Press, 2002, pp.169-285. Figure 4 data come from U.S. Census Bureau *Nativity of the Population and Place of Birth of the Native Population*, 2004, www.census.gov/population/www/documentation/twps0029/tab01.html.

Net immigration is projected to be a predominant factor in future population growth If there were no net immigration [in the future,] the racial composition of the U.S. population would be quite different than projected in the middle series ... with 38 million people less than projected with immigration (p. 23).

Based on recent immigration inflows, the Census Bureau's middle series projects 820,000 net migrants a year (arguably conservative relative to the 1990 statistics cited above), broken out across the four groups above as follows: 350,000 Hispanics; 226,000 non-Hispanic Asians; 186,000 non-Hispanic whites; and 57,000 non-Hispanic blacks. If we accumulate these annual flows over 50 years, and we then assume that these immigrants will all be labor-force participants, we can estimate what shares of the future growth of minorities in the U.S. labor force will be accounted for by immigrants.³

What do these calculations show? *Between 2000 and 2050, immigrants are projected to account for 69.2 percent of the growth of minorities in the overall U.S. labor force.* For each of the three minority groups above, the shares are as follows: 27.1 percent for blacks, 58.1 percent for Hispanics, and 79.0 percent for Asians.

It is important to stress that issues of minority labor-force growth in the United States are largely discussions of minority immigration into the United States. Business managers and policy makers must understand this increasingly important feature of the U.S. economy. Challenges of minority business involvement are challenges of immigrant business involvement as well.

1.4 Implications for the U.S. Economy: Overall Productivity

The data are stark. In future decades the U.S. labor force will grow much more slowly than in the past, and any growth that is realized will be accounted for entirely by minorities—whose growth, in turn, will be accounted for largely by immigrants. It is important to emphasize why these changes matter for the overall U.S. economy. We first address slower labor-force growth, and then the rising role of minorities and immigrants in this slower-growing labor force.

Slower growth in the U.S. labor force will mean greater pressure to raise the rate of U.S. productivity growth. There are two basic ways by which an economy can make more output, and thus more income to support higher living standards: by adding more workers, or by raising the productivity of workers by giving them more and/or better capital, technology, and skills. To sustain output growth, less labor-force growth must be matched by higher productivity growth.

The following two quotations emphasize this point. Here is Alan Greenspan, Chairman of the U.S. Federal Reserve System.

[T]he nation's fortunes, to a very great degree, depend on the evolution of the growth of productivity It is structural productivity growth that determines how rapidly

³ This assumption that each immigrant enters the labor force ignores issues such as U.S. births to immigrants, U.S. deaths of immigrants (and dependents), and the fact that some immigrants do not enter the labor force. These are well beyond the scope of this simple analysis, but at least some of them (e.g., births and deaths) would tend to offset each other.

living standards rise over time Productivity growth is an unmitigated good for the large majority of the American people.⁴

And here is noted economist and *New York Times* columnist Paul Krugman.

Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker ... the essential arithmetic says that long-term growth in living standards ... depends almost entirely on productivity growth Compared with the problem of slow productivity growth, all our other long-term economic concerns—foreign competition, the industrial base, lagging technology, deteriorating infrastructure, and so on—are minor issues. Or more accurately, they matter only to the extent that they have an impact on our productivity growth.⁵

It is widely recognized that in the coming decades the United States will face important fiscal pressures—pressures that have much to do with demographics discussed above and that can be best addressed by boosting American productivity. Here again is Chairman Greenspan.

Policymakers will soon have to address the budget implications of the impending retirement of the baby-boom generation In about 2008, the proportion of the working-age population that will retire is projected to begin escalating. Almost surely, the social security and Medicare benefits that are promised under current law to future retirees cannot be financed with existing tax rates Productivity would have to grow at a rate far in excess of the historical average to fully resolve the long-term financing problems of social security and Medicare.⁶

America faces a rising need for faster productivity growth—which at the operational level will be driven by how effectively workers and firms interact in producing goods and services. What does this mean for individual workers and individual firms? It means that American workers—who will increasingly be minority workers—will need to earn rising incomes driven by their rising productivity. And it means that American firms—whose owners and employees will increasingly be minorities—will need to be more dynamic. There is reason for concern on both fronts.

1.5 Implications for the U.S. Economy: Minority Workers and Businesses

One important challenge facing the United States and its need for faster productivity growth is that minority workers continue to realize worse employment and wage outcomes than do broadly comparable non-minority workers. Figures 5 through 7, reproduced from the U.S. Bureau of Labor

⁴ Remarks before the Independent Community Bankers of America, Honolulu, Hawaii, March 13, 2002, and before the Boston College Conference on the New Economy, March 22, 2000.

⁵ Paul R. Krugman, *The Age of Diminished Expectations*, Cambridge: MIT Press, 1999, pp. 9-13.

⁶ Remarks before the Securities Industry Association annual meeting, Boca Raton, Florida, November 6, 2003.

Statistics, document this gap for two major labor-market outcomes: unemployment rates and earnings.⁷

Figure 5: U.S. Unemployment Rates by Racial Group

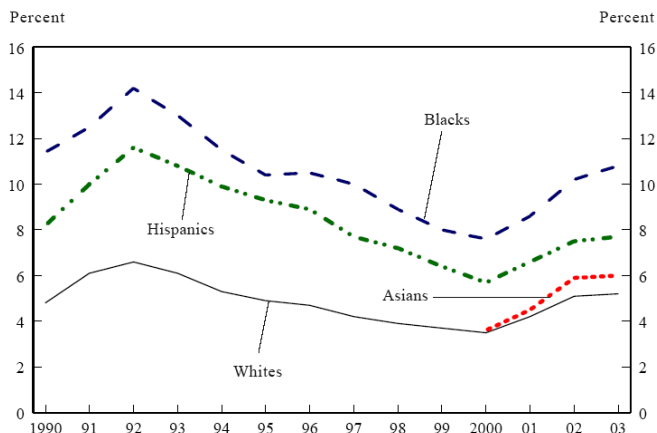
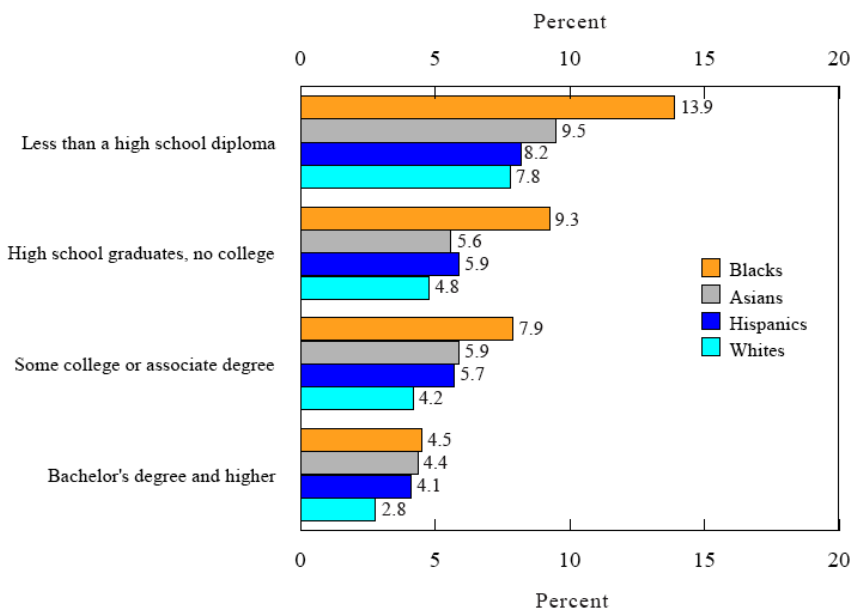


Figure 5 shows that unemployment rates in the U.S. labor market have remained consistently higher for Asians, blacks, and Hispanics than for whites. At least some of these unemployment differences might be due to skills differences across racial groups. So Figure 6 shows 2003 average unemployment rates not just by racial but also four broad educational groups, because educational attainment is widely recognized as a crucial component of overall labor-market skills. The same message holds as in Figure 5: within all four educational groups, whites had the lowest unemployment rates.

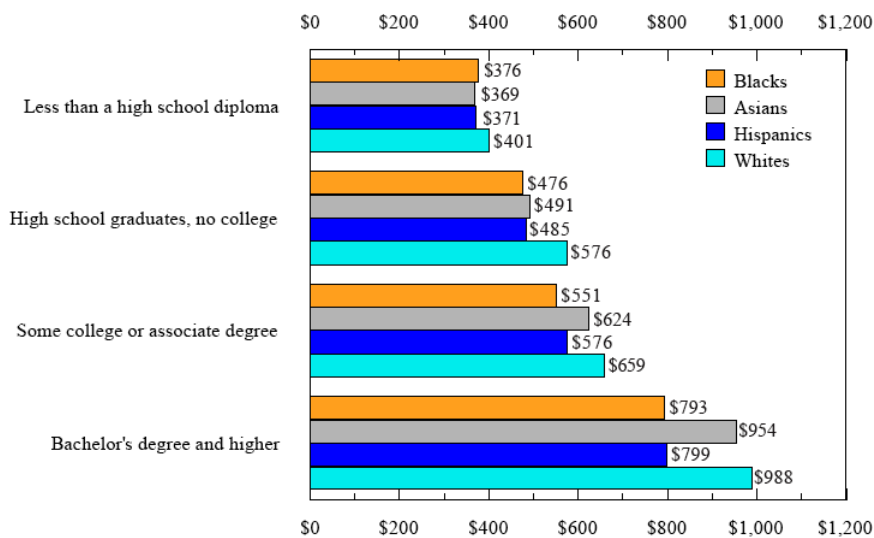
Figure 6: U.S. Unemployment Rates by Racial and Educational Groups



⁷ "A Visual Essay: Blacks, Asians, and Hispanics in the Civilian Labor Force," U.S. Bureau of Labor Statistics, *Monthly Labor Review*, June 2004, pp. 69-76. Figures 6 and 7 pertain to workers aged 25 and older.

Figure 7 paints a similar picture for earnings. Within all four educational groups, in 2003 whites enjoyed higher average weekly earnings (i.e., median usual weekly earnings of full-time wage and salary workers) than Asians, blacks, and Hispanics.

Figure 7: U.S. Earnings by Racial and Educational Groups



The racial differentials shown in Figures 5 through 7 appear in many other measures of labor-market performance, such as average duration of unemployment spells. They may partly reflect difficult-to-observe differences in labor-market skills. But there is substantial evidence that they also partly reflect racial discrimination.⁸ If these differentials persist in the future, then the rising share of minorities in the overall U.S. labor force will mean that performance gaps between workers will be increasingly pervasive.

A second important challenge facing the United States and its need for faster productivity growth is that minority-owned businesses may already be less dynamic than majority-owned firms. This concern has been raised in a number of analyses of the size and scope of minority-owned businesses in the U.S. economy. Figure 8 offers a snapshot of this concern. For the most-recent year of available data on minority-owned firms, 1997, it shows the share of minorities or minority-owned firms in economy-wide aggregates.⁹

⁸ In economics, a substantial body of research has examined racial discrimination in labor markets. A comprehensive survey appears in Joseph G. Altonji and Rebecca M. Blank, "Race and Gender in the Labor Market," in Orley Ashenfelter and David Card (eds.), *Handbook of Labor Economics*, Volume 3, Elsevier Science Publishers, 1999. In recent economics research, Bertrand and Mullainathan find "significant discrimination against African-American names: White names [on resumes submitted by the authors to actual help-wanted advertisements] receive 50 percent more call-backs for interviews." See Marianne Bertrand and Sendhil Mullainathan "Are Emily and Greg More Employable than Lakisha and Jamal? : A Field Experiment on Labor Market Discrimination," *American Economic Review*, 2004, forthcoming. Labor-market discrimination is one element of discrimination more generally, a topic of substantial research in a number of fields that is far too broad to cover here (see, for example, an analysis of racism in Andrew Hacker, *Two Nations: Black and White, Separate, Hostile, Unequal*, New York: Scribner Books, 1991).

⁹ Data on minority-owned firms come mainly from various years of the Surveys of Minority-Owned Business Enterprises. The data in Figure 8 come from the 1997 SMOBE, except for the labor-force share, which is taken from Figure 3a. Examples of analysis of SMOBE data include Patricia Buckley, "Keys to Minority Entrepreneurial Success: Capital, Education, and Technology," U.S. Department of Commerce, Minority Business Development Agency, September 2002; and "The State of Minority-Owned Businesses: 1997 SMOBE—An Initial Analysis plus Policy and Research Implications," U.S. Department of Commerce, Minority Business Development Agency, revised September 5, 2001.

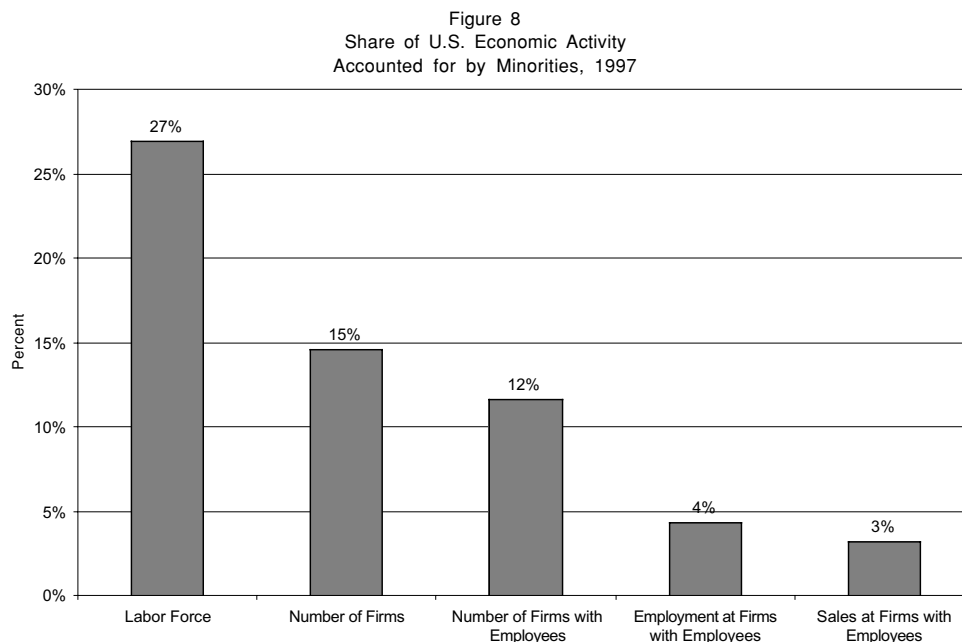


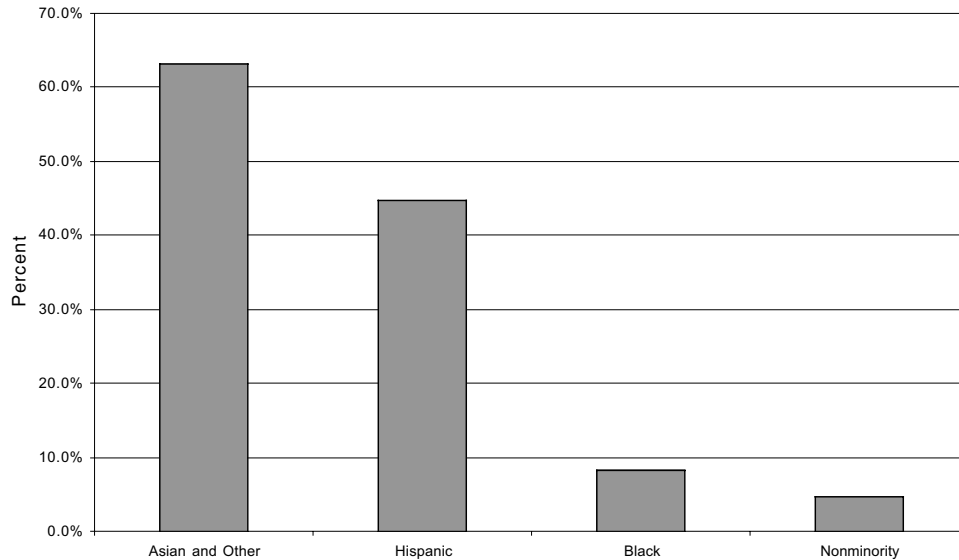
Figure 8 suggests that minority-owned firms are lagging in ownership and performance relative to the broader role of minorities in the U.S. economy in terms of labor force. Though they accounted for about 1 in 4 workers in 1997, minorities owned a far smaller share of firms—barely 1 in 9 firms with employees—and these firms accounted for a very small share of U.S. employment and sales.

Does the evidence in Figure 8 link up with the evidence presented earlier in this section? Yes. *Not only might minority-owned businesses already be less dynamic, but they are also the firms in the U.S. economy whose owners are much more likely be immigrants and whose employees will be disproportionately drawn from minority populations.*

Figure 9 shows how the important link documented earlier between immigrants and workers also appears between immigrants and business owners. For the most-recent year for which such data are available, 1992, this figure documents by racial group what fraction of business owners were born outside the United States.¹⁰

¹⁰ These data and those in Figure 10 are taken from *1992 Economic Census: Characteristics of Business Owners*, U.S. Department of Commerce Census Bureau, Publication CBO92-1.

Figure 9
Share of U.S. Businesses with Foreign-Born Owner



Only 4.7 percent of non-minority-owned firms were reported as owned by immigrants. For blacks the share was nearly double, at 8.4 percent. The striking shares are for Hispanics, nearly 10 times higher at 44.8 percent, and Asians and others, at 63.2 percent. Taking these three groups, fully 39.1 percent of all minority-owned businesses was owned by immigrants.

This link from immigration to minority-owned businesses helps explain other patterns of these firms. For example, it has been reported that the six top states for minority-owned businesses are California, Texas, New York, Florida, Illinois, and New Jersey: in 1997 they accounted for 62.4 percent of all such firms.¹¹ But these six states are precisely the ones commonly referred to as the “immigration gateways” where immigrants—both legal and illegal—tend to settle upon arriving in the United States. In 2000 these six were home to 73 percent of all U.S. immigrants (but only 36 percent of natives).

¹¹ Table 3 of “The State of Minority-Owned Businesses: 1997 SMOBE—An Initial Analysis plus Policy and Research Implications,” U.S. Department of Commerce, Minority Business Development Agency, revised September 5, 2001.

Figure 10
Share of U.S. Businesses with at Least 50% Minority Employees

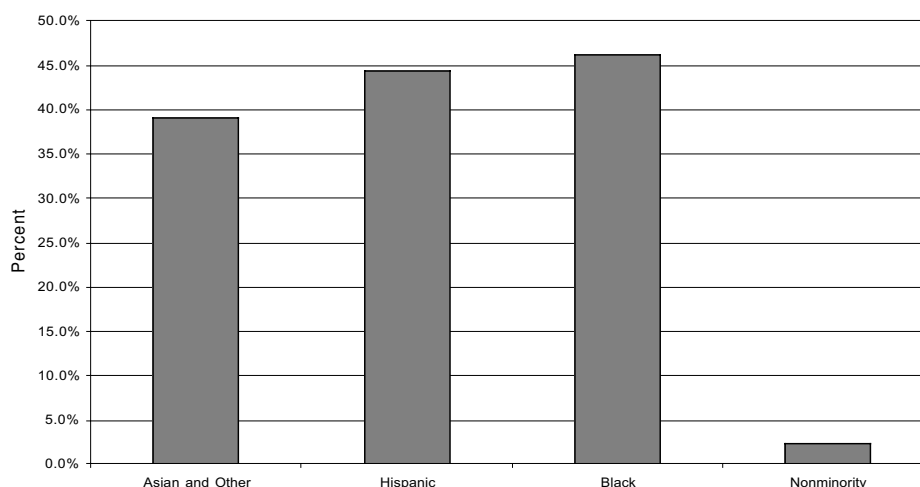


Figure 10 documents the very different hiring practices of majority and minority-owned firms. For the most-recent year for which such data are available, 1992, this figure documents by racial group what fraction of businesses have workforces that are at least 50 percent minority workers. *The difference is striking. Only 2.4 percent of non-minority-owned firms had such a racially diverse workforce. For all groups of minority-owned firms the share was about 40 percent.*

1.6 Summary: Do We Know Enough About Minority-Owned Businesses?

In the coming decades the U.S. labor force will grow much more slowly than in the past. What growth will be realized will be accounted for entirely by minorities—whose growth, in turn, will be accounted for largely by immigrants. It is precisely minority-owned businesses whose owners are much more likely to be immigrants and whose employees will be disproportionately drawn from minority populations. But there is evidence that minority-owned workers fare worse in employment and earnings, and that minority-owned businesses are already less dynamic than are majority-owned firms.

Taken together, the combined evidence provides a sobering portrait of the future of the U.S. economy. It has always been important for minority-owned businesses to succeed. It is now more important than ever.

But do we have a complete enough understanding of minority-owned businesses to be most effective in helping them succeed? Do we know what the competitive challenges are that face owners and managers at these firms? Are we sure of how policymakers should prioritize their support for these firms? Unfortunately, we think that the answer to these questions is “no.” Accordingly, we next turn to a framework for understanding the performance of minority-owned businesses.

Section 2

The Life Cycle of the Firm: A Methodology for Analyzing Minority-Owned Firm Performance

Summary: Analysis of the problems and potential of minority-owned businesses requires not just a series of snapshot perspectives but rather a comprehensive framework that follows firms from their beginning to their end. This section introduces the concept of the life-cycle of a firm and divides a firm's existence into four phases: birth, adolescence, maturity, and death.

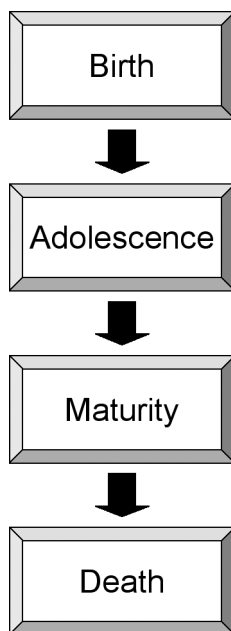
The extraordinary changes that will occur in the U.S. population over the next few decades increase the importance of understanding the prospects and pitfalls facing minority-owned firms. Both managers and policy-makers need timely information about the factors promoting and limiting the success of minority-owned firms. In this section we develop a framework to analyze the performance and growth of minority-owned firms. The methodology integrates concepts from the literature in economics, strategy, and finance and emphasizes a holistic approach to understanding minority-owned business growth and failure. The emphasis is on rigorous empirical approaches that will lead to conclusions about the sources and nature of potential underperformance by minority-owned firms relative to other firms in the economy.

2.1 Introduction to the Life-Cycle Concept

To develop such a general framework, we conceptualize a firm as having a life cycle analogous to that of an individual: starting with birth and ending with death. To understand how minority firms prosper or fail, we must understand how they behave at each point during the life cycle. More importantly, our methodology requires that we follow the path of individual firms over the course of their existence. Answering the most important questions facing minority-owned firms is not possible with snapshots of the minority business community taken every five years.

Our framework emphasizes that there may be a multitude of factors that inhibit or promote firm growth and that these factors may vary in importance during the life cycle of the firm. If minority-owned firms are indeed different from other firms in the economy, a complete understanding of the driving forces can only be derived from analyses of the firm at all stages of its development.

The Life Cycle of a Firm



Formally, we will divide the life of a firm into four stages corresponding roughly to its inception (birth), early stages of growth (adolescence), expansion or decline (maturity) and on to its ultimate end (death). There is obviously a great deal of potential overlap in each of these phases, so their study is not mutually exclusive. In addition, detailed study of each stage will likely lead to a greater refinement of the analytical framework.

However, to analyze minority-owned firm performance and develop appropriate management and public policy responses, these four phases provide an important first step in developing our understanding. Perhaps most importantly, the adoption of such a framework argues for empirical work that tracks firms over time, i.e., a longitudinal rather than cross-section approach to minority enterprises. By merely positing a framework that evolves over time for each firm, we are arguing emphatically for a complete re-thinking of the origins and solutions to potential underperformance by minority-owned firms.

2.2 Changing the Questions We Ask

In light of a life-cycle framework, the nature of the questions about minority-owned businesses in the U.S. economy will naturally change from static queries (How many are there? How much do they sell? How many are employed?) to dynamic ones (How are minority-owned firms born? How fast do they grow? How many emerge from adolescence? Are they smaller at maturity? Are they more likely to fail?).¹²

¹² Some of the questions have already been raised in the literature, e.g., Jan E. Christopher, "Minority Business Formation and Survival: Evidence on Business Performance and Viability," *Review of Black Political Economy*, Summer 1998, 26(1), pp. 37-73, and Thomas D. Boston, "Trends in Minority-Owned Businesses" in *America Becoming: Racial Trends and Their Consequences*, Volume 2, Washington D.C.: National Academy Press, 2001.

We argue that such a change in viewpoint is necessary before we can address the fundamental questions about minority-owned firms and how they are changing over time. For example, as shown in Figure 8, minority-owned firms are underrepresented as a fraction of total firms relative to minority shares in the adult workforce. With a cross-sectional focus one is unable to discern whether this is due primarily to a low rate of firm startups, a high rate of firm shutdowns, or a combination of the two. The difference is critical to appropriate policy formulation: should concerned public officials focus on incubating entrepreneurs or addressing issues related to firm shutdowns?

To understand the nature of the life-cycle framework, we first briefly describe the four stages and point out key ideas and questions associated with each stage. *We reiterate that without a longitudinal framework that follows firms over time throughout their lives one cannot understand the factors that enhance or constrain the development of minority-owned businesses.*

2.3 Phase One: Birth

The logical starting point in the analysis of minority-owned businesses is their creation. Among the four stages in the life cycle, the circumstances surrounding the births of minority-owned firms, and especially the activities of minority entrepreneurs, have received the greatest amount of attention. The birth of a minority-owned firm is almost always inextricably linked to the concept of an individual minority entrepreneur with an idea in search of economic resources. While the typology of the entrepreneur is a powerful image for all Americans, the birth of a firm can take a variety of forms from the workings of an individual entrepreneur operating in his/her garage to the arrival of a full-blown, large-scale firm carved out of an existing enterprise. In between, new firms appear in a wide range of sizes and with a variety of organization and ownership structures.

This variety of new business types begs the question of whether minority-owned firms are different at birth than firms owned by non-minorities. In particular, in thinking about the life cycle of the firm, the nature of firm birth may play an important role in subsequent growth and success.¹³ In addition, the over-representation of minority firms with no employees (Figure 8) may reflect differences in the form of start-up, due to financing constraints or other impediments to acquiring the managerial and financial tools needed for larger enterprises at birth.¹⁴

¹³ Recent work by Timothy Dunne, Shawn D. Klimek, and Mark J. Roberts, "Entrant Experience and Plant Exit," National Bureau of Economic Research Working Paper No. 10133, 2003, argues that the form of market entry is highly correlated with the probability of survival in the market.

¹⁴ David G. Blanchflower, Phillip B. Levine, and David J. Zimmerman, "Discrimination in the Small Business Credit Market," *The Review of Economics and Statistics*, November 2003, 85(4), pp. 930-943.

2.4 Phase Two: Adolescence

After startup, perhaps the riskiest period in a firm's life spans the first few months and years. In framing the study of minority firms in terms of how they progress, or fail to progress, over time, it is imperative to examine the performance of such firms during their first years in business. Understanding the factors that influence success in adolescence, or the period just after the firm begins business, is critical in developing a comprehensive picture of the evolution of minority-owned businesses.

To see the importance of this stage of firm life we need only turn to the empirical literature in industrial organization, which is thick with studies of the relationship between the age and size of a firm and its success.¹⁵ The results from those studies emphatically show that, over any interval, younger and smaller firms are more likely to go out of business. If minority-owned businesses have trouble growing at early stages, they will have lower employment creation throughout their lives and will also be more likely to fail. To date none of the research on firm survival has addressed potential issues related to minority ownership. The smaller size of minority-owned businesses relative to their majority-owned counterparts (see Table 1, page 24) may in fact reflect problems in this early part of their existence.

2.5 Phase Three: Maturity

The life cycle approach to the study of minority-owned firms requires that we analyze all aspects of firm performance over time. After startup and early expansion, surviving firms often enter a calmer period of slower growth. While this later phase is often more stable and thus less exciting, it represents a crucial period in the life of a firm. It is in these years that firms contribute heavily to overall employment growth.

Understanding the factors that lead to prosperity and failure of mature firms is an essential ingredient in the analysis of minority-owned businesses. In contrast to much of the received wisdom, both big and small firms play important roles in the creation of new jobs.¹⁶ Given the impending demographic transitions described in Section 1, any comprehensive study of minority-owned firms must include a detailed description of the factors that allow mature businesses to thrive.

2.6 Phase Four: Death

Understanding the cause of the end of a firm's life is clearly paramount to unraveling the performance differences between minority-owned and non-minority-owned firms. While there is a large literature on firm, industry, and market-related factors that affect firm closure, little or none of that research analyzes factors related to minority ownership and much of it focuses on the manufacturing sector where minority-ownership rates have historically been lower.¹⁷

¹⁵ See Andrew B. Bernard and J. Bradford Jensen, "The Deaths of Manufacturing Plants," National Bureau of Economic Research Working Paper No. 10133, 2002, and Timothy Dunne, Mark J. Roberts and Larry Samuelson, "The Growth and Failure of U.S. Manufacturing Plants," *Quarterly Journal of Economics*, 1989, 104(4), pp. 671-698.

¹⁶ Steven J. Davis, John C. Haltiwanger and Scott Schuh, *Job Creation and Job Destruction*, Cambridge: MIT Press, 1996.

¹⁷ See Bernard Jensen, *op cit.*, and Richard Disney, Jonathan Haskel, and Ylva Heden, "Entry, Exit and Establishment Survival in UK Manufacturing," *Journal of Industrial Economics*, 2003, LI.

Perhaps more importantly, there is another crucial end-of-life difference for minority-owned firms: they may cease to exist precisely because they are successful. While most minority-owned firms will cease operations upon “death,” some of these businesses will be acquired, go public, or otherwise change their ownership structure and thus no longer be counted in the minority-owned category. To understand the problems facing minority-owned firms that force them to close, we must also identify the factors that let some of these firms flourish.

Taken together, these four phases of the life cycle of a firm present a large challenge to the existing modes of analysis. There are few, if any, studies that are able to track firms during each of the individual life-cycle phases and no work that integrates the four periods into a comprehensive picture of the life of minority-owned firms in the United States.

Section 3

The Importance of the Life Cycle: Concepts

Summary: In this section we explore in more detail the four phases of the life cycle of a firm. We develop a set of questions around each element that should be addressed as we formulate an integrated understanding of the factors affecting success and failure of minority-owned businesses. We also attempt to point out how answers to many of the existing questions about minority firms can be answered only by research that is able to follow individual firms over time.

3.1 Birth

The start of life for a firm contains many of the ingredients for its subsequent success and failure. Previous researchers have recognized the importance of firm births and have focused their attention on issues related to individual entrepreneurship.¹⁸ This work has found that low levels of asset-holding and the lack of entrepreneurial activity among parents play important roles in determining whether minority individuals will become self-employed.¹⁹ In spite of such research, existing data can tell us little about many of the keys questions surrounding the birth of minority-owned firms.

At a basic level we would like to know whether there are differences between minority- and majority-owned firms in terms of the rate of firm creation, the characteristics of the firms upon birth, their access to technology, capital, and expertise, and the determinants of their choices over geographic location and industry. Little is known about the firms that are created by minority entrepreneurs and whether they have the necessary characteristics to thrive and grow.

Birth

- Entrepreneur (individual)
- Entrepreneurs (team)
- Spin-off of an existing company
- Change of ownership (LBO, purchase)

Adolescence

- First months or years

Maturity

- Interval after initial few years

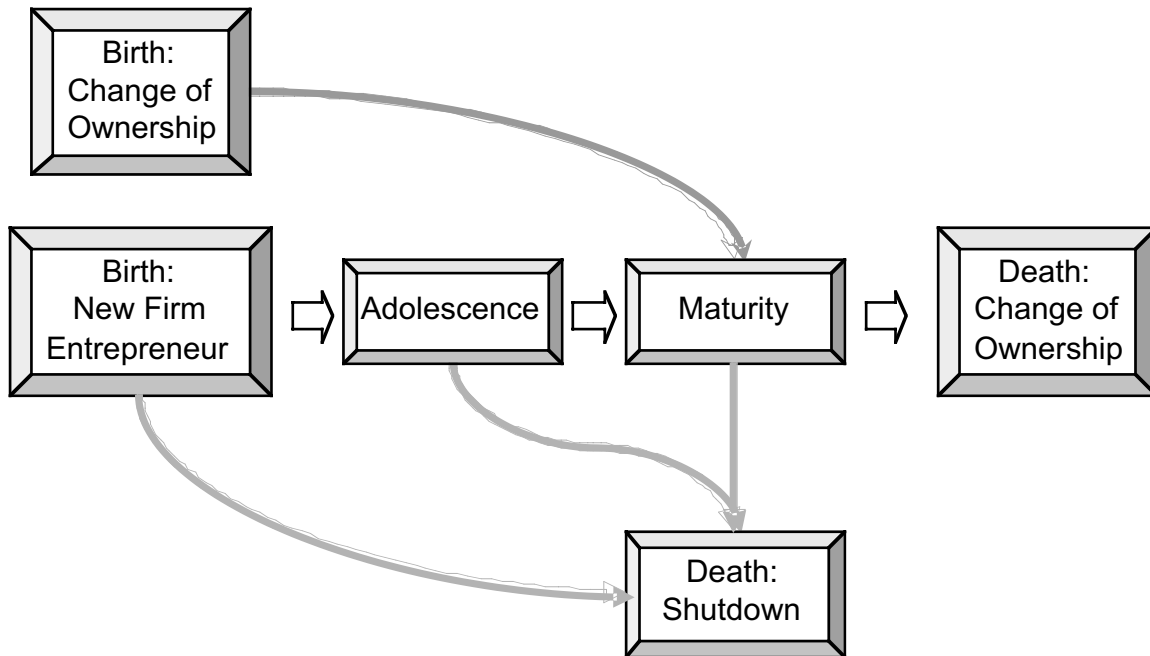
Death

- Firm shutdown
- Change of ownership
- Public offering
- Acquisition
- Merger

¹⁸ Examples include Patricia Buckley, *op cit*; Robert W. Fairlie, "The Absence of the African-American Owned Business: An Analysis of the Dynamics of Self-Employment", *Journal of Labor Economics*, 1999, 17, pp. 80-108; George J. Borjas and Stephen Bronars, "Consumer Discrimination and Self-Employment," *Journal of Political Economy*, 1989, 97, pp. 581-605; and Timothy Bates, "Entrepreneur Human Capital and Minority Business Viability," *The Journal of Human Resources*, 1985, 20(4), pp. 540-554.

¹⁹ Robert W. Fairlie, *op cit*.

The Life Cycle of a Minority-Owned Firm



We emphasize that while entrepreneurial activity has been duly recognized as a critical component in the success of minority-owned enterprises, to date there has been little or no research on the prevalence of other forms of business start-ups and whether these forms differ across minority and majority owners. Without such information we do not even know whether large-scale startups exist among new minority-owned businesses or what might prevent their formation.

The Birth of Minority-Owned Firms: Key Research Questions

- Are minority-owned start-ups more likely to be no-employee entrepreneurial firms?
- Is initial firm size smaller for new minority-owned firms with employees?
- Do minority-owned firms start life with less capital, less technology and lower human skill sets?
- Why is the distribution of minority-owned firms concentrated in certain geographic regions and in certain industries?
- Is market access limited for minority-owned startups? Is access to financing limited for new minority-owned firms?
- How frequently do minorities take ownership of existing businesses?

3.2 Adolescence

The early period after the startup of a firm is well-known to be critical for business success. Failure rates among young firms are vastly higher than for older firms and a large fraction of U.S. businesses fail within the first year. The adolescent phase of a firm's life is a make-or-break period. However, without a life-cycle approach to the analysis of the firm, we cannot determine what factors matter most for minority-owned firms in this important time period. We suspect that minority-owned businesses are more likely to fail during these early years than majority-owned firms. However, unless we can track the path of a firm over time we cannot resolve even this first-order question.

The Early Years of Minority-Owned Firms: Key Research Questions

- How do financing limitations affect the growth of new minority-owned firms?
- Are growth rates for surviving young minority-owned firms comparable to those for majority-owned firms?
- Can minority-owned firms attract workers with education and skills comparable to majority-owned firms?

If minority-owned firms fail more often in their early years, we need to understand the reasons before formulating strategies for either managers or policy-makers. Here the life-cycle approach is again crucial. Are minority-owned firms born without the necessary ingredients for success, or are they limited after they form? If minority owners face disproportionate difficulties in raising capital, accessing bank loans, hiring skilled employees, and developing their own management skills, then we would expect to see these limitations reflected in relatively poor performance in this earliest stage of life.

3.3 Maturity

Many of the issues facing mature minority-owned firms parallel those at startup or adolescence. The relatively small size of minority-owned enterprises may in part be driven by limitations facing mature firms. Within industries, do minority-owned businesses face constraints that limit their growth and success or is it the case that surviving minority-owned firms are comparable to majority-owned enterprises?

Again we find that without the ability to follow firms over their entire history, we cannot address the primary questions we have about the success of minority-owned firms. If growth in the mature phase is lower for minority-owned firms, is it an outcome of prior constraints or is it due to new limits faced by such enterprises such as the ability to expand into new markets, either geographic or product?²⁰

²⁰ For a study on minority business and market access, see Timothy Bates, "Minority Business Access to Mainstream Markets," *Journal of Urban Affairs*, 2001, 23(1), pp. 41-56, and Timothy Bates and Darrell Williams, "Do Preferential Procurement Programs Benefit Minority Business?" *The American Economic Review Papers and Proceedings*, 1996, 86(2), pp. 294-297.

Mature Minority-Owned Firms: Key Research Questions

- Are minority-owned firms able to expand to new regional and product markets at the same rate as majority-owned firms?
- Are minority-owned firms equally likely to be part of a multinational supply chain?
- Does growth slow earlier for minority-owned firms?
- How frequent is growth by merger for minority-owned firms?
- Are minority-owned firms able to take advantage of globalization through exporting or international supply chains?

3.4 Death

The life-cycle framework of the firm emphasizes the links between firm outcomes over time. The causes and consequences of firm shutdown are among the most important issues to be addressed in the study of minority-owned firms. Problems at birth, during adolescence, or among mature firms can all lead to increased failure rates for minority-owned firms. Without the ability to follow firms over time, and without the development of comparable data on the rates of firm failure among minority-owned and majority-owned firms, we cannot hope to understand what the future holds for the minority-owned business.

Our understanding of the causes of failure among the overall population of firms is developing rapidly. Multi-product, multi-establishment firms with skilled workers, access to technology, heavy capital usage and access to foreign markets are far more likely to survive.²¹ Related research suggests that minority-owned businesses have lower access to capital and technology. To date, however, the role of the minority owner has been neglected in the study of firm shutdowns. Similarly, we do not know whether minority-owned firms are less likely to have multiple product lines or have fewer export opportunities.

The Death of Minority-Owned Firms: Key Research Questions

- Do minority-owned firms face the same probability of closure as comparable majority-owned firms?
- Do minority-owned firms issue stock at the same rate as comparable majority-owned firms?
- Are minority-owned firms at a disadvantage when being considered as acquisition targets?

While the study of firm shutdowns is fundamental, we cannot ignore one aspect of “death” that is peculiar to minority-owned firms. A minority-owned firm may cease to exist if it undergoes a substantial change in ownership structure with no fundamental change in its employment or sales. This represents perhaps the most powerful argument for the life-cycle framework. If the most successful firms are eventually publicly traded and owned by the public at large, then the most

²¹ Bernard and Jensen, *op cit*.

successful minority-owned enterprises will eventually stop being minority-owned and enter the ranks of majority-owned firms.

This element of categorization is not merely a statistical quirk, it also raises a new set of serious questions about the future of minority employment. As documented in Figure 10 of Section 1, minority-owned firms are more likely to employ minority workers. When firms change from minority to majority ownership, do they also change their employment patterns or do they continue to be strong employers of minority workers? Clearly the answer to this and other questions about the behavior of minority-owners and their firms can only be adequately addressed by following them over time.

We have argued for a life cycle approach to the analysis of minority-owned firms. In doing so, we have organized the framework into four phases, roughly corresponding to a timeline: birth, adolescence, maturity, and death. While we have organized the discussion around each phase, we strongly caution that they must be analyzed together as part of an integrated framework.

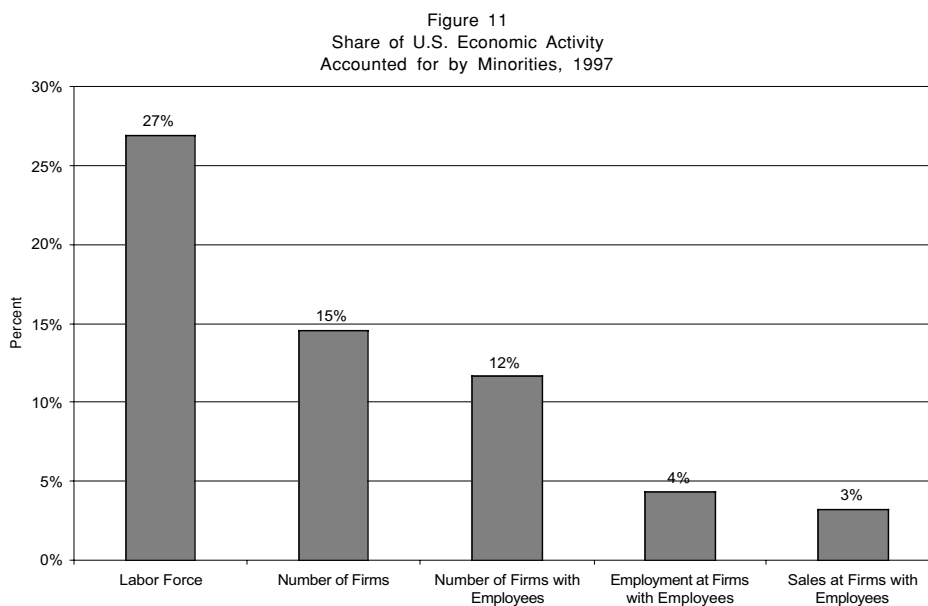
Section 4

The Importance of the Life-Cycle: Examples from the Data

Summary: The most pressing questions raised by the existing information on minority firms concern their low numbers, lower wages, smaller size, and lower productivity. This section presents three such questions and two or more possible explanations for each question. Without a life-cycle approach to the firm, none of these questions can be adequately answered.

The importance of developing a complete picture of minority-owned firms at birth and over their life cycle can be best seen with a series of examples motivated by the existing data collected by the Department of Commerce. For each example, we first present the facts followed by at least two different interpretations of the same facts. Then we highlight the differences of each interpretation for minority managers and policy-makers. We emphasize that in each case, the currently available information is not sufficient to choose between the two interpretations. In every instance, further analysis based on the life-cycle framework is needed to give proper guidance to both managers and policy-makers.

4.1 Example #1: The Scarcity of Minority-Owned Firms



The Facts: Figure 11, which replicates Figure 8 from Section 1, shows that compared to the share of minorities in the labor force (27 percent), minority-owned firms are relatively scarce (15 percent of all firms). Minority-owned firms with employees are even scarcer (12 percent of all firms with employees). The shares are even lower for employment and sales (4 percent and 3 percent respectively). By this measure the minority population is not creating its share of firms in the

economy or jobs at those firms, and by implication there are serious consequences for employment, wages, and the accumulation of wealth by minorities and also in the broader U.S. economy.

Scenario 1: Any attempt to understand the low share of minority-owned firms must start with the circumstances surrounding their creation and disappearance. One obvious explanation for the low shares of minority-owned firms is below-average firm creation by minorities. Of course, an alternative is that minority-owned firms have higher than average failure rates, or perhaps both lower birth rates and higher death rates.

Scenario 2: There remains an additional potential explanation for the relatively low numbers of minority owned firms. The natural progression in the life-cycle of a successful minority firm may lead it to diffuse the ownership share of the founder, for example through a public offering. In that case, the most successful minority-owned firms will eventually stop reporting themselves as minority-owned. From this optimistic perspective the low numbers represent success through changes in ownership rather than failure.

The Implications: The differences between these potential explanations of the facts are critical for both managers and policy-makers. The structure of any attempt to increase the number of minority-owned firms depends crucially on understanding the forces at work. The encouragement of minority entrepreneurs may raise firm creation rates but will not raise the number of minority-owned firms if the problem lies with an abnormally high rate of firm shutdown.

Whatever the sources of the low firm shares, we can only identify them and develop appropriate responses if we know what the typical minority-owned firm does over the course of its life. Tracking both the births and deaths of firms, both minority and majority-owned, requires data maintained over time.

4.2 Example #2: Poor Performance Characteristics at Minority-Owned Firms

The Facts: Much of the motivation for research into the differential performance of minority-owned firms comes from the survey data collected by the Department of Commerce. In 1997, the latest comprehensive year available, the Survey of Minority-Owned Business Enterprises (SMOBE) reported that compared to majority-owned firms, the average minority-owned firm (with employees) had 4 fewer employees (40 percent), had sales \$634,000 lower (50 percent), paid its workers \$5,200 less per year (23 percent), and generated \$25,200 fewer annual sales per employee (20 percent), i.e., lower productivity. (See Table 1.) These lower performance measures held even if one accounts for the fact that more than three quarters of minority-owned firms tend to be in industries with below average wages, smaller firm size, and lower productivity. Identifying the sources of this relatively poor performance is high on the list of policy priorities facing the minority community.

Table 1: Performance Characteristics of Firms

	Employees per Firm	Sales per Firm	Annual Payroll per Employee
Minority-owned	6	\$641,629	\$18,186
Majority-owned	10	\$1,276,367	\$23,480

Scenario 1: Again we argue that any attempt to distinguish between competing explanations must start with analysis of firms over time. Consider a rosy, if somewhat unlikely, scenario. The lower size, sales, wage and productivity of minority-owned businesses are driven by a common underlying factor discussed above – successful minority-owned firms become majority-owned firms. It is well documented that larger, older firms pay higher wages and have higher productivity and it is precisely these larger, older firms that are most likely to change their ownership structure.

Scenario 2: Of course, the alternative explanations are not quite so benign. Higher failure rates, lower sizes for mature minority-owned firms due to limited market access, restricted access to financing, or inadequate pools of skilled labor are all possible forces constraining both their size and performance.

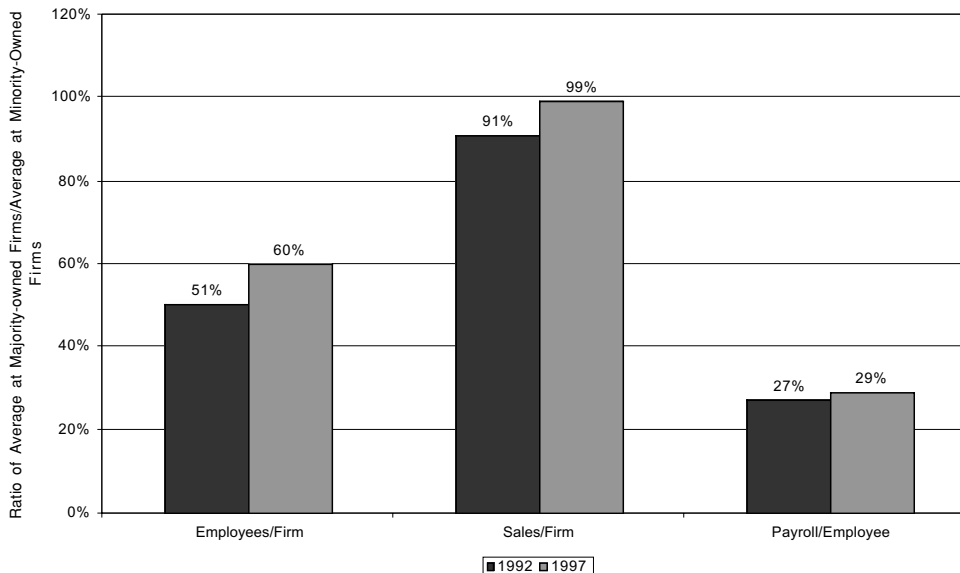
Scenario 3: A variant of the previous scenario points toward the characteristics of minority-owned firms when they first start. If new minority-owned firms are under-funded, have weaker managerial capabilities, or target small, relatively unprofitable markets, then the source of the overall poor performance of minority-owned firms may arise in their earliest days.

The Implications: If the apparently poor performance characteristics are an outcome of success as suggested by scenario 1, then little new action is needed. If they underperform because of poor access to financing, technology, education, and the marketplace, then direct responses by managers and policy-makers are needed. However, even that does not adequately address the problem. We need to know when minority-owned firms are at greatest risk, e.g., when they need assistance with funding, in order to formulate best responses.

4.3 Example #3: The Growing Performance Gap

The Facts: The best available estimates from the Census Bureau suggest that the number of minority-owned businesses increased rapidly from 1992 to 1997, up 29.6 percent as opposed to 3.6 percent for all other firms. As Figure 12 shows, however, other numbers from the same surveys suggest that the relative size of minority-owned firms in terms of employment and sales decreased during that time. The average majority-owned firm had 51 percent more employees in 1992, but by 1997 had 60 percent more employees. Similarly, sales at majority-owned firms were 91 percent higher than those at minority-owned firms in 1992 but were 99 percent higher in 1997. Even measures of labor-market outcomes worsened in relative terms over the period: majority-owned firms paid 27 percent more in 1992 but that had increased to 29 percent in 1997.

Figure 12
The Growing Performance Gap Between Majority- and Minority-Owned Businesses



Scenario 1: One potential interpretation of such a barrage of bad news is that minority-owned firms substantially underperformed during the early 1990s. Limits on access to capital, technology and skills may have caused firm growth to be lower for minority-owned firms relative to majority-owned firms. Existing research supports the idea that minority-owned firms face differential access to capital, and plentiful research in the finance literature emphasizes the importance of access to capital for firm growth and success.²²

Scenario 2: Another explanation is that during the 1990's, minority-owned firms experienced two distinct phenomena related to the life-cycle of the firm. First, the huge increase in the number of minority-owned firms suggests that a large new cohort of young firms had arrived on the scene. Almost by definition these new firms would drive down measures of firm size such as employment and sales. Substantial research in labor economics has shown that wages are positively related to firm size and firm age.²³ Again the entry of a relatively large number of minority-owned startups may be driving down the reported average wages across all minority-owned firms. Of course, without information on the number and size of minority-owned (and majority-owned) firms by age, we cannot determine the importance of new firms on the overall measure of firm size.

Scenario 3: The surge in new firms is not the only life-cycle factor that might explain the diminishing relative performance measures and wages at minority-owned firms during this interval. If existing, mature minority-owned firms were able to successfully grow and attract interest from capital markets, they may have actually left the minority-owned category. Precisely those firms that are the largest and pay the highest wages are those that are most likely to merge, issue stock, or become acquisition targets themselves. A period of unusual success for minority firms may be the source of apparent poor performance.

²² Ken S. Cavalluzzo and Linda C. Cavalluzzo, "Market Structure and Discrimination: The Case of Small Businesses," *Journal of Money, Credit, and Banking*, 1998, 30 (4), pp. 771-792.

²³ Charles Brown and James Medoff, "The Employer Size-Wage Effect," *Journal of Political Economy*, 1989, 97, pp. 1027-59.

The Implications: As in the previous two examples, there are competing perspectives on a common set of facts. The rise in the number of minority-owned business may call for redoubled efforts to ensure their survival by addressing precisely the set of issues that have historically constrained these firms and limited their success. Alternatively, this surge may represent the front edge of a wave of new minority business activity that will require new managerial and policy responses going forward as the face of U.S. business changes. Without a life-cycle perspective on the performance of minority-owned businesses, we will be unable to assess the contributions of these competing hypotheses to the evolution of minority owned businesses in the United States.

The central message of this section is that many essential facts about the status of minority-owned businesses in the United States cannot be fully understood without additional data and analysis organized around the life-cycle perspective. Such a richer understanding will require additional efforts on the part of minority-owned businesses and statistical agencies. Our closing section proposes an agenda for such efforts.

Section 5

An Agenda for Action

Summary: The life-cycle framework requires new data and new analysis. Existing data sets that track firms over time contain much of the relevant information needed to undertake research using the life-cycle framework. The Survey of Minority-Owned Business Enterprises can be linked to these existing datasets to provide much of the needed data. New data can be generated on subsets of firms in conjunction with future SMOBEs. Minority-business owners and managers must be full partners in the research process.

This paper has focused on a looming demographic transition, the under-representation and under-performance of minority business, and a framework for analysis. We have emphasized that there is a critical need to answer questions about minority-owned firms. We have argued that only with a life-cycle perspective can we understand what factors are holding back minority firms and what can be done to unleash their potential.

At first glance it may appear that the information requirements of the life cycle framework are overwhelming and would require many years of large-scale data collection and analysis. *In this section, we outline a strategy that will yield many of the answers we seek, as well as provide guidance for both policy-makers and managers. Most importantly, this agenda can largely be implemented with existing resources and existing data.* At the end of the section, we offer suggestions on supplementary types of information that might be collected in years going forward. Finally, we strongly urge the inclusion of minority business owners as full partners in the research process. The aim of the agenda is to greatly enhance our ability to ask and answer the most relevant question for every minority businesses: How can my business succeed?

5.1 The Existing Data

In its current form the Survey of Minority-Owned Business Enterprises (SMOBE) is conducted every five years, its data are analyzed by the Census Bureau, and this analysis is reported in tabular form. This approach yields a series of cross-sectional snapshots of the minority-business community.

We think the SMOBE information could potentially be used in a different approach: to allow the Census Bureau to link the SMOBE data to a set of existing databases on the economy that already track firms over time. Most importantly, the information in SMOBE can be linked to the Longitudinal Research Database¹ and to the Business Register², both maintained by the Census Bureau. The key aspect of both these databases is that they track establishments and enterprises over time, i.e., they are longitudinal in nature rather than cross-sectional.

²⁴ <http://www.census.gov/econ/overview/ma0800.html>

²⁵ <http://www.census.gov/econ/overview/mu0600.html>

The Longitudinal Research Database (LRD) is particularly useful in studying issues of productivity, profitability, and the uses of research and development. Its focus was originally on the manufacturing sector, but it has broadened in scope in recent years. The Business Register database (BR) covers establishments of all domestic employer and non-employer businesses and contains information on business location, organization type (e.g., subsidiary or parent), industry classification, and operating data (e.g., receipts and employment).

The power of such linked sets of data is hard to overstate. With relative ease one could examine the life cycle of individual minority-owned firms: what they look like at birth, during adolescence, in maturity, whether they expand successfully into new markets or new products, how their employment evolves over time, and how they die. Most importantly all these questions could be asked of both minority and majority-owned firms. Examining both sets of firms in tandem would be essential for identifying issues particular to minority ownership.

5.2 Possible Additional Data

Of course, no dataset is complete. The LRD and BR are no exception to that rule. As our understanding of the life cycle of minority businesses improves, additional information will be needed. Rather than initiating new surveys, a cost-efficient alternative may be to use supplements to the existing SMOBE surveys for a subset of firms. Current reporting burdens of the SMOBE appear quite low relative to tax information and other surveys collected from firms. Supplements of this type could gather information on access to capital, information, and technology. They could also collect details on the education, nationality, and skills of workers and managers.

5.3 Minority-Owned Businesses As Full Partners

Finally, any future research on minority-owned businesses should include owners and managers of such businesses as full partners. This agenda will only be successful if it asks and answers the right questions. Neither policy-makers nor academics nor business owners alone can address the looming fundamental demographic issues. However, in partnership, these three communities can speed the research process and disseminate the relevant results in a timely fashion.

Numerous models of interaction are possible, including large scale presentations at MBDA conferences. Meetings in smaller, less formal venues early and often during the research process will raise new questions and point in new directions for the answers.

We have outlined a simple yet effective agenda for action on the study of minority-owned businesses. Making use of large quantities of existing data and the substantial efforts already embodied in the SMOBE, researchers can begin to use the life-cycle framework we have presented. The stakes for the U.S. economy of this reorganized research are very large.

5.4 Conclusion: Why This Agenda for Action Matters for America

In closing, it is important to restate why implementing the agenda we have outlined in this section is so important for America. Today the United States is at a crucial demographic turning point. In future decades the U.S. labor force will grow much more slowly than in the past. Moreover, this slower labor-force growth will be accounted for entirely by minorities—whose growth, in turn, will be accounted for largely by immigrants.

These demographic changes mean that the success or failure of minority-owned businesses will increasingly drive the success or failure of the overall U.S. economy. Slower growth in the U.S. labor force will mean greater pressure to raise the rate of U.S. productivity growth, the essential ingredient for economic success over the long run. Will the fiscal pressures driven by the coming retirement of baby boomers be manageable? What sort of standard of living will our children enjoy? Increasingly, the answers to these sorts of fundamental questions will depend on the productivity and dynamism minority-owned businesses. It has always been important for minority-owned businesses to succeed. It is now more important than ever.

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Matthew J. Slaughter

Matthew Slaughter is Associate Professor of Business Administration at the Tuck School of Business at Dartmouth. He is also a Research Associate at the National Bureau of Economic Research, a Visiting Fellow at the Institute for International Economics, and a Term Member at the Council on Foreign Relations. In recent years he has also been a Visiting Scholar at the Federal Reserve Board and the International Monetary Fund, and a Consultant at the World Bank and the U.S. Department of Labor.

Professor Slaughter's area of expertise is the economics and politics of globalization. This research has been supported by several grants from organizations including the National Science Foundation and the Russell Sage Foundation. More than three dozen articles by Professor Slaughter have been published as book chapters and in academic journals, on several of which he currently holds editorial positions.

In addition to numerous presentations at academic conferences and seminars, Professor Slaughter has spoken to many non-specialist audiences such as the National Academy of Sciences, the National Press Club, and testimony before the Finance Committee of the U.S. Senate. His work has been featured in business media such as Business Week, The Economist, Financial Times, Time, The Wall Street Journal, and The Washington Post. He has been interviewed on programs including CNN's Lou Dobbs Tonight and NPR's Marketplace. Professor Slaughter received a BA from the University of Notre Dame in 1990 and a PhD from Massachusetts Institute of Technology in 1994.

The Tuck School of Business at Dartmouth and Its Role in Minority Business Development

The Tuck School, the first graduate school of business, is one of the top management schools in the world. Tuck's faculty members are outstanding scholars with a passion for teaching and research. At the cutting edge of their disciplines, they are highly regarded for their expertise in key areas of business practice.

Tuck combines the intellectual and competitive strength of a large university with the soul of a tightly knit community. Tuck offers only one degree program—the full-time MBA. Such focus allows Tuck to offer outstanding support to its students and faculty. In addition to its MBA program, Tuck offers a select array of executive education and other nondegree programs, like the Tuck Minority Business Executive Program (MBEP).

In 2004, Tuck celebrates MBEP's 25th year. When MBEP debuted, it was the first program of its kind in the nation. Its mission was to help minority-owned companies grow by offering their senior managers the same high-caliber executive education available to Fortune 500 corporations. Successfully fulfilling this mission over the years has earned Tuck a national reputation for unparalleled excellence in MBE development. Since the start of MBEP, over 2,000 MBEs have used the tools and strategies they learned at Tuck to develop and strengthen their businesses. Their success, in turn, has created jobs in communities across the country.

Extending this chain of success has depended on the generosity of major corporations, resource organizations, and government agencies committed to increasing opportunities for minority-owned firms. For example, the Tuck School has been partnering with the Minority Business Development Agency of the Department of Commerce to help maximize the effectiveness of MBDA's national network of Minority Business Development Centers (MBDCs), Native American Business Development Centers (NABDCs), and Minority Business Opportunity Centers (MBOCs) that offer a wide range of business services directly to minority entrepreneurs. Through a grant from the Small Business Administration, the Tuck-MBDA partnership has focused on developing a systemic approach for these MBDA-funded organizations to use to provide consistent, high-quality services to emerging firms.