Does Firm Size Matter for Growth and Poverty Alleviation?

Ross Levine

Brown University and the NBER*

June 2005

^{*} Harrison S. Kravis University Professor, Department of Economics, Brown University, 64 Waterman Street, Providence, RI 02912. rlevine@csom.umn.edu. This paper was prepared for the PGE-Blum 2005 Conference, "The Private Sector in the Fight against Global Poverty," Aspen, Colorado, August 2-5, 2005. Maria Carkovic provided helpful comments.

Introduction

Should countries and international aid agencies subsidize small and medium enterprises (SMEs)? Many argue that targeted assistance of SMEs is an effective strategy for spurring entrepreneurship, reducing poverty, lowering income inequality, and stimulating economic growth. Some skeptics, however, challenge this conclusion and instead argue that, at best, SMEs are a characteristic of successful countries, not a cause of that success.

The World Bank and other international financial institutions have clearly taken sides in this debate. For example, the World Bank Group approved more than \$10 billion in SME support programs over the last five years. Furthermore, World Bank documents (1994, 2002, 2004) suggest that this flow of support to SMEs is unlikely to abate. But, is this a good strategy for fighting poverty? Could these finds reap greater development returns in other areas?

This paper first briefly reviews the arguments and empirical evidence for and against subsidizing SMEs. There are good conceptual arguments for all sides of this debate. At this point, however, the statistical evidence does not provide much support for subsidizing SMEs. In this last section, I focus on the broader political and institutional setting underlying economic growth and poverty alleviation and describe this broader view's implications for policies regarding SMEs.

Pro-SME View:¹

The pro-SME view is based on three core arguments.

First, SME advocates argue that SMEs enhance competition and entrepreneurship and hence boost economy-wide efficiency and innovation. Intuitively, the entry of small firms – and the threat of new firm entry – intensifies competition and productivity growth throughout the economy. Thus, direct government subsidization of SMEs will help countries exploit the social benefits of a more dynamic corporate sector.

Second, some supporters of the Pro-SME view also argue that SMEs are more labor intensive than large firms. Expansion of the SME sector, therefore, will boost employment and hence reduce poverty. This suggests that subsidizing SMEs represents a tool for fighting poverty.

Third, SME proponents frequently claim that SMEs are more productive than large firms, but financial market and other institutional failures impede the formation and growth of SMEs. For example, some financial institutions funnel credit to well-established firms with whom they have long-standing relationships, rather than lending money to newer firms with better projects. This socially inefficient allocation of capital slows economic growth and discourages entrepreneurship. As another example, inefficient legal systems make it more costly and risky to use formal contracts to finance projects. This may lead financial systems to fund well-established, well-connected firms rather than relying on the formal contracting system to fund new firms with potentially high-return projects. Thus, poorly functioning legal systems encourage socially inefficient entrenchment: Credit flows to the same firms based historical, and some cases, familial and political ties, rather than to those firms with the best projects.

From this perspective, direct government support to productive SMEs will improve the allocation of capital, boost economic growth, and give hope to aspiring entrepreneurs. Some retort that if the problem is poorly functioning financial and legal institutions, then fix these institutions; subsidizing SMEs is an ineffective and potentially counterproductive palliative. Pro-SME proponents, however, respond that it takes an exceptionally long time to build efficient institutions. Thus, from a practical perspective, governments can circumvent bad institutions and directly fund productivity-enhancing SMEs. Critically, this view assumes that government subsidization programs choose SMEs based on their expected social returns, not based on political connections or corruption.

Skeptical-SME view:

There are five skeptical views of the efficacy of targeting assistance to SMEs.

First, some analysts take a diametrically opposite view and advertise the advantages of large firms relative to SMEs. In particular, large enterprises can exploit economies of scale and more easily undertake the large fixed costs associated with research and development (R&D). Thus, large firms are better than small firms at innovating and boosting productivity.

Second, skeptics challenge the assumption that SMEs are better for labor.

Research finds that SMEs are neither more labor intensive, nor better at job creation than large firms (Little, et al., 1987). Indeed, some researchers find that large firms provide more stable, higher-quality jobs than small firms (Rosenzweig, 1988). Furthermore, problems in financial, legal, and political systems may impede the ability of firms to

grow to their most efficient sizes. Thus, lots of SMEs may be a sign of a malfunctioning financial system, not a signal of vitality and innovative activity.

Third, some skeptics of the pro-SME view argue that policy makers should not focus on subsidizing SMEs, rather policy makers should focus on improving the full range of institutions that affect the overall business environment. This involves removing barriers to the entry of new firms, lowering impediments to the exit of failing ones, reducing regulatory, tax, and other impediments to the efficient reallocation of labor, and enhancing the operation of legal and regulatory institutions that affect the financial system and business relations. Although these policies may boost SMEs, the goal is to make the business environment better for all firms, not promote SMEs per se.

Fourth, critics of pro-SME policies argue that SME subsidization programs are likely to fail in exactly those economies where SMEs most need government subsidies to grow. The logic is as follows. Countries with poorly functioning political systems (closed, uncompetitive, autocratic political regimes) tend to also have poorly functioning legal and financial institutions too. Poor legal and financial systems impede the flow of capital to SMEs and instead channel society's savings to established, politically connected firms. Thus, SMEs are most in need of government subsidies in countries with poor political systems. At the same time, however, poor political systems are unlikely to create subsidization programs that circumvent ineffective legal and financial systems and fund sound SMEs. This leads to the conclusion that where SMEs most need subsidies, SME subsidization is likely to operate ineffectively. At a broader level, in countries where small elites run the government, banks, and big industry, government-sponsored

SME programs will have a low probability of funding the best firms from a social welfare perspective.

An example from history helps clarify this criticism of SME subsidization policies.² In the late 19th century, Porfirio Diaz solidified control of Mexico. To finance government expenditures with loans from banks, Diaz formed one huge bank (Banamex) and allowed the bankers to write the banking laws, which protected the banking system from competition. The board of directors of Banamex included the President of Congress, the Under-Secretary of the Treasury, the Senator for the Federal District, the President's Chief of Staff, and the brother of the Secretary of the Treasury. Moreover, from 1886 to 1901, all of the (nongovernmental) loans extended by Banamex went to the directors! In this type of political-financial system, government-run SME programs are unlikely to break the stranglehold on society's savings.

Fifth, skeptics question the validity of considering firm size as a determinant of economic success. For example, the natural resource endowments of a country may give that country a comparative advantage in the production of goods that are produced most economically in large firms (e.g., steel). Other countries may have natural and human resources that give the country a technological advantage in producing products that are most efficiently produced in small firms. Thus, the proportion of SMEs across countries may reflect differences in physical and human capital resources. From this perspective, pro-SME policies could actually distort firm size and potentially hurt economic efficiency.

Evidence on the Pro-SME view:

Given the enormous amount of aid supporting SMEs around the world, there is surprisingly little evidence underlying this policy. Although Acs and Audretsch (1987) find that small firms have higher innovation rates in "high technology" skill-intensive industries within the United States, Pagano and Schivardi (2001) show that a larger average firm size is associated with faster innovation rates within Europe. In developing countries, technology transfers from abroad and imitation drive productivity improvement (Rosenberg, 1976; Baumol, 1994). In contrast to the pro-SME view, however, research indicates that large exporting firms are typically the primary mechanism through which technologies are adapted from abroad to local circumstances. Thus, from a developing country perspective, the firm level evidence does not favor SME subsidization as a mechanism for boosting innovation and productivity growth.

Similarly, while early work by Birch (1979) argued that small firms are particularly important for job creation, subsequent research has refuted this conclusion. As noted above, microeconomic evidence does not robustly conclude that SMEs boost employment or provide better jobs. Although pro-SME advocates claim that SMEs stimulate competition, innovation, and productivity growth to a greater degree than large firms, the evidence is at best inconclusive.

Rather, an emerging body of research finds that firm size responds to the functioning of national financial and legal systems. For instance, Beck et al. (2003) demonstrate that financial development eases financial constraints on successful firms and allows them to grow. Kumar et al. (2001) show that countries with better legal systems – legal systems that more efficiently enforce private contracts – tend to have

¹ See Beck, Demirguc-Kunt, and Levine (2005) or references.

larger firms. Since financial and legal institutions affect SMEs, large firms, and the distribution of firms in the economy, these findings indicate that policymakers should not view SMEs as exogenous determinants of economic growth: These findings suggest that policymakers should not view SMEs as engines, where pouring in more subsidies fosters growth and alleviates poverty. Instead, this work sheds the policy reform spot light on regulatory and legal reforms that improve the functioning of financial and legal systems.

Finally, Beck et al (2005) provide cross-country evidence on whether SMEs boost economic growth, alleviate poverty, and reduce income inequality. They find a strong, positive association between the size of the SME sector and the rate of economic growth. But, they do not find that SMEs cause growth. Furthermore, the comparisons do not indicate that SMEs exert a particularly beneficial impact on poverty or income distribution. Although a prosperous SME sector is a characteristic of flourishing economies, the evidence does not support the pro-SME prescription of directly subsidizing SME development to accelerate growth and reduce poverty.

* * *

In sum, there is no clear verdict from econometricians on the efficacy of subsidizing SMEs. Pro-SME advocates argue that there are good conceptual arguments for concluding that SMEs boost growth. They stress that well-designed SME programs can identify worthy entrepreneurs, provide funding for their innovative ideas, and thereby provide a catalytic effect on the economy. Pro-SME proponents point to the close association between the size of the SME sector and economic growth across countries as evidence for their view. Skeptics of SME subsidization point to the absence of statistical evidence in support of the pro-SME view. There is little, if any, evidence that SMEs

actually cause growth. They argue that government directed credit programs have failed miserably around the world because corruption and cronyism divert these funds to unproductive ends. To reduce poverty and stimulate economic development, skeptics of the pro-SME view will instead stress the advantages of devoting funds that are currently flowing into subsidizing SME and redirecting those resources to improving legal and regulatory institutions in developing economies.

Pro-SME Policies: Broader Context:

At one level, the differences between pro-SME and skeptical-SME views can be exaggerated. Both agree that vibrant, private sector-oriented entrepreneurship is crucial for economic growth, poverty alleviation, and providing opportunities for people to fulfill their aspirations. Both agree that institutional failures stymie the emergence of new, innovative firms. Both agree that institutional failures promote and facilitate entrenchment, where privileged elites have unchallenged access to capital markets and business opportunities. They differ in terms of solutions. Pro-SME advocates believe direct subsidization programs for SMEs can help until there are improvements in the institutions. In contrast, holders of the skeptical-SME view emphasize that political failures are the source of institutional failures and these same political failures will undermine the effectiveness of government-run subsidization programs.

In this last section, I will briefly discuss the links between the political system, policies toward the financial systems, the operation of banks, and why this is relevant for the SME debate. The goal of this section is to take a step back from SMEs per se and

emphasize the broader context in which policymakers need to contemplate reforms that will allow the private sector to operate more efficiently and reduce poverty.

Joseph Schumpeter (1912), who is sometimes called the father of development economics, argued that the banker authorizes the entrepreneur in the name of society to innovate. His point is that the financial system mobilizes savings and decides who gets to use these savings. This is a crucial decision. If the financial system identifies and finances entrepreneurs with sound projects this fosters innovation and economic prosperity. If the financial system funnels credit to friends and cronies, then this discourages entrepreneurship and thwarts economic development. Thus, the financial system is crucial because it distributes society's savings.

Since the financial system influences who gets to start or expand a business and who does not, financial sector policies attract the attention of the economically and politically powerful. For example, in the early decades of the United States, the Federalists granted banking licenses to Federalists, not to Republicans. Thus, government used public policies to funnel society's savings to political constituents. When the Republicans gained control of the federal and state governments, they quickly granted banking licenses to their supporters. The emergence of new banks increased competition and allowed a broader set of entrepreneurs to compete for scarce capital. It was only through political competition that the United States enjoyed competition within the financial system. Thus, greater political competition facilitated a more efficient allocation of resources and hence faster economic growth.

The idea that the political system influences financial sector policies is supported by cross-country evidence presented in a new book by Barth, Caprio, and Levine (2005).

They show that open, competitive, democratic political systems tend to choose financial sector policies that encourage the entry of new banks, foster greater competition among financial institutions, and grant less of a role to government-owned banks. In contrast, they find that countries with more autocratic, less open and uncompetitive political systems choose financial sector policies that protect existing banks and reduce competition in capital markets. This is not surprising. Sound financial sector policies funnel capital to projects with the highest expected returns, which may subvert the interests of powerful segments of society. Consequently, these powerful interests frequently use their political influence to enact rules and regulations that thwart competition and help maintain the status quo.

Since the political system influences financial sector policies, which in turn influence how banks and other segments of the financial system allocate capital, this line of argument stresses that understanding the role of SMEs in an economy cannot be usefully disentangled from that country's political institutions. Competitive, open political systems are likely to produce regulations and legal systems that foster competition in the financial system that lead to an efficient allocation of capital. In this context, there is little need for direct subsidization of SMEs. More closed, autocratic political systems are likely to select regulations and legal systems that impede competition in the financial sector and that funnel credit toward politically attractive ends. In this context, there are serious questions about whether government sponsored and managed subsidization programs will circumvent political pressures and direct credit toward promising SMEs.

References

Acs, Zoltan J. and David B. Audretsch. 1987. "Innovation, Market Structure and Firm Size." Review of Economics and Statistics 69, 567-574.

Barth, James, Gerard Caprio, and Ross Levine. 2005. *Rethinking Bank Regulation: Till Angels Govern*. Cambridge University Press, forthcoming.

Baumol, William J. 1994. *Entrepreneurship, Management and the Structure of Payoffs*. Cambridge: MIT Press.

Beck, Thorsten, Asli Demirgüç-Kunt, and Ross Levine. 2005. "SMEs, Growth, and Poverty." National Bureau of Economic Research Working paper 11224, March.

Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic. 2003. "Financial and Legal Institutions and Firm Size" World Bank mimeo.

Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic.2005. "Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?" *Journal of Finance* 60, 137-7.

Birch, David L. 1979. *The Job Generation Process: Final Report to Economic Development Administration*. Cambridge, MA: MIT Program on Neighborhood and Regional Change.

Bodenhorn, Howard. 2003. State *Banking in Early America: A New Economic History*, Oxford: Oxford University Press.

Haber, Stephen, Armando Razo, and Noel Maurer. 2003. *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico*. Cambridge: Cambridge University Press.

Kumar, Krishna B., Raghuram G. Rajan, and Luigi Zingales. 2001. "What Determines Firms Size?" University of Chicago. CRSP Working Paper No. 496.

Little, Ian M.D., Dipak Mazumdar, and John M. Page, Jr. 1987. *Small Manufacturing Enterprises: A Comparative Analysis of India and Other Economies*. Oxford: Oxford University Press.

Pagano, Patrizio, and Fabiano Schivardi. (2001). "Firm Size Distribution and Growth." Banca d'Italia Working Paper 394.

Rosenberg, Nathan. 1976. *Perspectives on Technology*. Cambridge University Press

Rosenzweig, Mark R. 1988. "Labor Markets in Low-Income Countries." In *Handbook of Development Economics*, Vol. 1, edited by Hollis B. Chenery and T.N. Srinivasan. Amsterdam: North-Holland.

Schumpeter, Joseph A. 1912. *The Theory of Economic Development*, translated by R. Opie. Cambridge, MA: Harvard University Press, 1934.

World Bank. 1994. *Can Intervention Work? The Role of Government in SME Success*. Washington, DC: World Bank.

World Bank. 2002. Review of Small Business Activities. Washington, DC: World Bank.

World Bank. 2004. Review of Small Business Activities. Washington, DC: World Bank.

Endnotes:

¹ This review of the literature borrows liberally, without further attribution, from my paper with Thorsten Beck and Asli Demirguc-Kunt (2005).

² Haber et al. (2003) describe the links between the political, financial, and industrial rules in Mexico.