

New and Small Firms in Expanding Markets

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ABSTRACT. The recent expansion of markets and increased standardization has not, as might be expected, been associated with an expansion of the role of larger firms. Recent data on new and small firms has indicated a substantial and expanding role for new and small firms in the global economy. There appear to be substantial differences between sectors, as competitive advantage in some is achieved through aggregation (upsizing) and in others thorough disaggregation (downsizing) of the productive process. New data is providing new knowledge on the role of firm size and age on economic growth. The advanced economies of the future will not be dominated by old, large firms.

1. Introduction

Do larger markets favor larger firms? Will new or small firms have a role in the expanded global economy? If one attends to past experience and the current conceptions of modern economies the answer would be yes – large markets favor large firms – and no – there will be a limited role for new or small firms in the future global economy. However, a number of very recent analyses and events suggests that the types of large markets currently in development not only provide substantial opportunities for new and small firms, but that a dynamic new and small firms sector is critical for growth in these markets. Rather than a weak and vulnerable sector that may require subsidies, the new and small firm sectors may not only thrive in the new global markets, but a necessary component necessary for enhanced economic well-being.

There is much evidence of the growth of large firms in large markets over the past centuries. The

history of industrial economies is the story of the advantages of size that leads sectors to consolidate into oligopolies or monopolies. In some cases this has required, for the common good, government policies to ensure that competition exists. This is usually defined as competition between a few large firms, each with a substantial market share. This may be accompanied by programs and policies that are designed to provide assistance or support for those in the SME sector, to ensure they are not taken advantage of by large, established firms and, quite often, actions to satisfy the small business political constituency.

Such concerns were reflected in the broad range of programs developed within the European Union (EU) in the years preceding “1992,” the year full integration of the European market was to have occurred. This large, standardized market was to provide a major advantage for large firms and there was considerable concern over the viability of the small firm sector. But were the fears for the health of the SME sector justified? Apparently not, for the number of jobs and the amount of economic activity in the SME sector has remained substantial and, in some cases, grown. Analysis of EU country employment, value added, and sales by firm size indicates that SMEs have increased their share on all measures of economic activity up to 1990. In the early 1990’s the share of value added and sales may have shifted slightly to favor the larger firms. There was, however, no major shift in employment shares by size (ENSR, 1993, 1994, 1995). In fact, many large business organizations – particularly those owned and managed by national governments – have experienced substantial losses.

The same discussions and fears for small business have occurred in the United States and Canada as the North American Free Trade Agreement (NAFTA) has been implemented.

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While some individuals firms may be affected, the impact of NAFTA on the new and small firm sector has yet to be established.

2. SMEs in international trade: a current assessment

The fear of large firm dominance in the global market has also been a familiar theme, leading to considerable attention to the current or potential role of new and small firms in international trade. A very recent assessment of SMEs and internationalization has been completed by the Organization for Economic Co-operation and Development (OECD) Working Party on SMEs. Attention was given to 18 OECD Member countries and 8 Asian economies (Indonesia, Korea, Malaysia, People's Republic of China, Singapore, Taiwan, Thailand, and Vietnam). Although some new data was assembled in a few countries, the assessment emphasized analysis using existing data and a number of complications needed to be resolved. For example, most measures of export activity excluded micro firms (0–19 employees). Further, no indirect participation in international trade could be tracked, so the impact of an SME supplying a multi-national firm could not be determined (OECD, 1995).

The analysis determined that, as of the early 1990s, SMEs had a substantial presence in international trade. About 10% of all SMEs (mostly in manufacturing) were involved in direct foreign investment. Within OECD Member countries 26% of direct exports were provided by SMEs; this figure was 35% among the Asian countries. It was estimated that there are about 35,000 transnational corporations in the world, of which 20,000 have less than 500 employees. While only 1% of SME manufacturing firms could be considered global, this is 30–40,000 firms across all OECD countries. A further 10–20% of manufacturing SMEs have 10–40% of their sales from exports (to 3 or 4 countries), a total of 300–600,000 firms across the OECD member countries. Finally, about 40% of all SMEs in the OECD member countries are considered to be insulated from globalization in 1995 – and 60% are not insulated. It is expected that 80% of all SMEs will be affected by, or involved in, international trade by 2005.

The analysis concluded that SMEs are currently a significant part of the global market and that their role will increase in future years.

3. New and small firms and economic growth

Analysis of the role of new and small firms in market growth has been hampered by the absence of firm size or firm age indicators in most business registries. As data sets are being revised to provide this information, preliminary evidence regarding the role of new and small firms in economic growth is beginning to develop: cross-national comparisons with European countries, comparisons across different economic sectors within a given national economy, and comparisons of different labor market areas within a single country. This last is consistent with very powerful examples of prosperous industrial districts.

Cross-national comparisons

The development of standardized data on firms, by size, across the EU member states makes it possible to consider the effect of changes in sector activity on subsequent growth in Gross National Product (GNP). The difference between the total annual sales of small and large firms may be compared through subtraction. If small firm sales growth exceeds large firm sales growth the difference is positive. This was computed for EU countries for three two-year periods and used in a linear model to predict change in GNP for the following periods. The analysis was completed for the EU-12 (predictions to 1991, 1993 and 1994) and for the EU-16 (predictions to 1993 and 1994). Despite the small number of observations the impact is statistically significant. A greater increase in the small firm sales, compared to large firm sales, leads to more growth in the national GNP in the following year (Thurik, 1995).

This would suggest that small firms are either a mechanism for transmitting economic growth or an independent source of growth. A source of economic growth not provided by large firms.

Cross sector comparisons

Another strategy is to compare changes in different economic sectors, using classification of

jobs and employment for different types of economic activity. A preliminary analysis comparing 33–34 manufacturing sectors was completed for each of seven OECD member countries (Schreyer and Chavoix-Mannato, 1995). In this case, the average establishment (not firm) size was utilized in linear models predicting job growth within the same economic sector for the 1985–90 period. Controls for growth in real output and a constant to capture trends in employment were included in the linear models. It was found that average establishment size explained about half the variation in employment growth. Manufacturing sub-sectors with a lower average establishment size had, even with controls for other factors, a greater level of overall job growth.

Despite the exploratory nature of this cross-sector analysis, it does suggest that the presence of smaller firms is associated with economic sector growth, even when the overall sector, manufacturing, may be in decline. Further, the same patterns were found among all seven OECD Member states included in the analysis.

Cross-regional comparisons

An alternative strategy makes use of standardized data sets within a single country. This involves comparing different internal geographic areas, considering SME presence and firm dynamics as related to economic growth in later periods. A program of research on the role of new and small firms in Swedish economic growth has been underway for some years (Davidsson, Lindmark and Olofsson, 1995). Using 80 labor market (or journey-to-work) areas as the unit of analysis, it has explored two aspects of the impact of “simples” (single site establishments); “branches” (unit within a multi-establishment firm); and “tops” (headquarters establishments) on economic change, including (1) the role of regional factors in establishment births and deaths and (2) the role of establishment births and deaths on subsequent economic growth. In Sweden, 99.99% of all simples have less than 200 employees and 98.6% have fewer than four.

Analysis of the effects of business dynamics on regional economic well-being has indicated that: (1) greater turbulence (firm births, deaths, contractions, and expansions) tends to lead to

enhanced economic well-being; (2) there were low correlations among measures of business dynamics, regions tended to be unique in this regard; (3) higher levels of change seemed to have a positive impact even when absolute levels of growth were modest; (4) firms births and deaths tended to have a more positive impact on economic growth than measures of expansions and contractions; and (5) the single most important factor affecting economic growth was simple birth rates.

This is, however, a complicated issue to analyze and the results are not well established in all OECD member countries. Similar findings were found in an analysis of 382 labor market areas in the United States (Reynolds and Maki, 1991; Reynolds, 1994). In this analysis, statistically significant impacts of measures of business volatility (firm births and deaths) on economic growth were found. Despite substantial and consistent positive correlations, linear models that controlled for other factors produced small, positive effects mostly related to dynamics in manufacturing. Conflicting results have been found for West Germany (Audretsch and Fritsch, 1992). In the U.S. analysis, it appeared that higher firm birth rates may be associated with an absence of economic growth, but regions with higher levels of growth almost always have higher firm birth rates in previous years. Firm births may be a necessary but not sufficient condition for subsequent economic growth.

These analyses suggest that (Davidsson et al., 1995):

... neither a high dependence on small firms nor on large firms solely appear to be optimal. The regions which have experienced the most favorable development of economic well-being are those that had a good mix of industries and business sizes, and whose business sector was characterized by a relatively rapid pace of change.

Industrial districts

Another source of evidence of the role of SMEs in producing economic growth has come from local productive systems. Arzeni (1995) points out that with the decline of the mass production model of industrial production, researchers have increasingly come to the conclusion that there is no single best way to organize an industry. The chain of

conception, execution, marketing and commercialization of a specific finished product can be successfully organized by firms in a variety of different ways. One way is through a local productive system (or “industrial district”) where there is (i) a dense relationship of business activity in a limited space, (ii) a focus on one industrial activity, (iii) a production process based a mass of small firms specializing in different phases of the process, (iv) a mix of competitive and co-operative inter-firm relationships, and (v) a host community with a local culture that is a mix of supportive socio-cultural norms and values and an “industrial atmosphere” (widespread local understanding of the production process along with a diffusion of technical skills and innovation).

One example of substantial regional differences is found in Italy (Pyke, 1995), where regions of “new industrialization” like Emilia Romagna, with a heavy concentration of small firms, grew in prosperity, whilst regions of “old industrialization”, like Lombardia and Piemonte, with a strong presence of large firms, declined. Between 1963 and 1984 Emilia Romagna real annual income (adjusted for inflation) per inhabitant grew 14%, while that in Lombardia and Piemonte declined 6 and 7%, respectively. High levels of out-of-region exports seem to be associated with such growth. Studies of the Italian woollen textiles sector suggested that productivity improvements in the smaller firms offset the higher wages providing them with lower labor costs. The larger firms do not seem to be able to create these productivity improvements.

While it is not clear what proportion of a national economic activity or growth is provided by these clusters of production excellence, it is clear that some regions are heavily dependent upon these industrial districts. They are very common in Italy and Spain, particularly in the textiles, clothing or footwear industries. Quasi-industrial districts can also be identified as an important part of more heterogenous regions, such as the cardiovascular device industry in Southern California, art auctioneers in London; optic and imaging industry in the Rochester/Finger Lakes region of New York state; McLaren Vale wine-making in Australia; and the automobile supplier industry in Baden-Wurtemberg, Germany (Arzeni, 1995). These analysis, suggest that under some

conditions and for certain types of economic production, a vigorous new and small firm sector is not an aberration, but a necessity for a competitive regional economy. Collectively, the SMEs in some industrial districts have created a sustained competitive advantage – for the district.

These four examples suggest, then, that new and small firms may have a major causal role in economic growth. Large firms will always have a major role, but this recent evidence suggests that new and small firms can be an independent source of economic growth.

4. Economic globalization

The changes that are expanding economic markets may be considered of two types: (1) technical advances in communication and transportation and (2) harmonization of the regulatory and institutional context in which economic activity takes place. The first reduces costs and the second reduces the risks associated with market transactions.

The major technical advances have been the reduced costs accompanied by increased reliability and speed in communications and transportation. This has been accompanied by a substantial expansion of English as the language of science, technology and business as well as the use of ASCII codes to relay electronic information. This has reduced many of the transaction costs associated with delivery of goods or services to customers, or acquiring goods or services from subcontractors or suppliers. Much of this standardization has occurred voluntarily within the businesses communities seeking more efficiency in their operations.

There has been considerable variation in the institutional structures and arrangements that provide the context in which business operates. A basic objective to be served by regional economic markets – EU, NAFTA, APEC (Asian Pacific Economic Community), MERCOSUR (Argentina, Brazil, Paraguay, and Uruguay) – reflects an attempt to standardize or harmonize the major features of the institutional and regulatory context. This should enhance the confidence of economic actors that all parties to transactions can be relied upon to fulfill their obligations.

These advances may have different effects on

business organizations in different sectors. In some sectors there are economic advantages to consolidation (upsizing). Both technical improvements and institutional harmonization reduces the costs and risks associated with entering into economic agreements with others. At the same time, it facilitates the control and coordination of multi-site firms. This would facilitate economic activity that can achieve advantages through covering a larger geographic and cultural domain, such as found in retail, consumer services, and perhaps the financial and banking services. There has been, in some large markets (such as the U.S.), a consolidation in retail and consumer service sectors. Internationally, there has been a market consolidation and harmonization in financial services and mass media production.

In other sectors, these shifts can increase the benefits of disaggregation, or downsizing. There is a change in the relative costs and benefits of using internal versus external sources for various goods and services. The advantages of using a formalized, hierarchical structure to reduce transaction costs and opportunism in economic exchanges may be reduced as the technical costs and institutional harmonization reduces the risks of engaging in contractual arrangements with subcontractors, suppliers, and consultants.

Some economic sectors may respond in both ways, consolidating the marketing and distribution of products, disaggregating the production process. The global firms in the automobile industry seem to reflect both tendencies – disaggregation of production, consolidation of distribution and marketing.

5. Concluding

Three observations have been discussed. First, there is substantial evidence that new and small firms are major direct participants in international trade and this may grow in the future. Second, vigorous new and small firm sectors may have an independent causal impact on economic growth. Third, the underlying changes that are the source of greater globalization of markets – technical advantages related to communication and trans-

portation, reduced risk from harmonization of regulations and the institutional context for economic activity – may have different impacts on different types of economic activity. Competitive advantage in some sectors may be gained through aggregation (upsizing) or consolidation, competitive advantage may be gained in others through disaggregation (downsizing).

Global markets are likely to be quite varied and turbulent as they expand. There will be many opportunities for new and small firms. Global economic well-being is likely to improve if a vigorous new and small firm sector in international trade. Given these changes, there will be considerable opportunities for individual scholars and research centers – in universities, governments, or private settings – to increase understanding of the mechanisms underlying economic growth and the roles of new and old, small and large firms.

References

- Arzeni, Sergio, 1995, International Seminar on Local Systems of Small Firms and Job Creation: Background Paper. OECD LEED Programme, Territorial Development Service. DT/LEED/WD(95)1.
- Audretsch, D. B. and M. Fritsch, 1992, Market Dynamics and Regional Development in the Federal Republic of Germany. Berlin, Germany: Wissenschaftszentrum Berlin (WZB), Discussion Paper FS IV 92-6.
- Davidsson, Per, Leif Lindmark and C. Olofsson, 1994, 'New Firm Formation and Regional Development in Sweden', *Regional Studies* 28(4), 395–410.
- Davidsson, Per, Leif Lindmark and Christer Olofsson, 1995, Smallness, Newness, and Regional Development in Sweden. OECD Industry Committee Working Party on Small and Medium Enterprises High-Level Workshop on "SMEs: Employment, Innovation and Growth", Washington, DC, 16–17 June.
- ENSR [European Network for SME Research], 1993, *The European Observatory for SMEs: First Annual Report*, Zoetermeer: The Netherlands: EIM Small Business Research and Consultancy.
- ENSR [European Network for SME Research], 1994, *The European Observatory for SMEs: Second Annual Report*, Zoetermeer: The Netherlands: EIM Small Business Research and Consultancy.
- ENSR [European Network for SME Research], 1995, *The European Observatory for SMEs: Third Annual Report*, Zoetermeer: The Netherlands: EIM Small Business Research and Consultancy.
- Organization for Economic Co-operation and Development [OECD], 1995, Globalization of Economic Activities and

- the Development of SMEs: Synthesis Report. Paris, France: DSTI/IND/PME (95)3. 16 Oct. 1995.
- Pyke, Frank, 1995, Comparing Small and Large Firms in Europe: Prospects for Incomes and Working Conditions. OECD Industry Committee Working Party on Small and Medium Enterprises High-Level Workshop on "SMEs: Employment, Innovation and Growth". Washington, DC, 16–17 June.
- Reynolds, Paul D., 1994, 'Autonomous Firm Dynamics and Economic Growth in the United States, 1986–1990', *Regional Studies* 28(4), 429–442.
- Reynolds, Paul D. and Wilbur R. Maki, 1991, *Regional Strategies Affecting Business Growth*, Minneapolis, MN: Department of Sociology, Final Report to the Rural Poverty and Resources Program, The Ford Foundation.
- Schreyer, Paul and Michelle Chavoix-Mannato, 1995, Quantitative Information on SMEs: OECD Approach, Data Collection and Examples of Analysis. OECD Industry Committee Working Party on Small and Medium Enterprises High-Level Workshop on "SMEs: Employment, Innovation and Growth", Washington, DC, 16–17 June.
- Thurik, Roy, 1995, Small Firms, Large Firms, and Economic Growth. OECD Industry Committee Working Party on Small and Medium Enterprises High-Level Workshop on "SMEs: Employment, Innovation and Growth", Washington, DC, 16–17 June.

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