



The SME Financing Gap

**VOLUME I
THEORY AND EVIDENCE**

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THEORY AND EVIDENCE

Volume I



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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PRINCIPES ET RÉALITÉS

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Foreword

At the 2nd OECD Ministerial Conference on SMEs held in Istanbul, Turkey in June 2004, Ministers recognised in the *Istanbul Ministerial Declaration* “the need to improve access to financing for SMEs on reasonable terms”. Ministers stressed that “while SMEs’ financing requirements differ at each stage of their development, policies should aim to ensure that markets can provide financing for credit-worthy SMEs and that innovative SMEs with good growth prospects have access to appropriately structured risk capital at all stages of their development”. Ministers encouraged the OECD to organise a thematic conference for further discussion to seek more innovative solutions and initiatives for facilitating SME access to financing. The high-level OECD Global Conference on “Better Financing for Entrepreneurship and SME Growth”, hosted by the Brazilian Government (Brasilia, 27-30 March 2006) in the framework of the *OECD Bologna Process on SME and Entrepreneurship Policies*, provided an occasion to achieve these objectives.

The present report “The SME Financing Gap: Theory and Evidence” was prepared by the SME and Entrepreneurship Division of the OECD Centre for Entrepreneurship, SMEs and Local Development (CFE) with Mr. John Thompson, consultant, and Mr. Stephen Lumpkin (OECD Directorate for Financial Affairs). Significant contributions were provided by Mr. Federico Bonaglia and Ms. Lucia Wegner (OECD Development Centre) and Mr. Tim Davis (OECD Statistics Directorate).

A Steering Group has guided the preparation of the Conference, and has offered many valuable comments during the drafting and review of this report. The Steering Group was comprised of the following countries: Australia, Brazil, Canada, Finland, France, Greece, Italy, Japan, Spain, the United Kingdom and the United States, along with the European Commission, International Labour Organisation (ILO), the European Patent Office (EPO) and the OECD Secretariat. The list of the Steering Group members is available in Annex D.

The report is issued under the responsibility of the Secretary-General of the OECD. Views expressed are those of the authors and do not necessarily reflect those of the Organisation or its member governments.

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List of Abbreviations

AFIC	Association Française des Investisseurs en Capital
AIM	Alternative Investment Market (London)
ASEAN	Association of Southeast Asian Nations
BANs	Business Angels Networks
BDS	Business Development Services
BMS	Banque Malienne de Solidarité (Mali Solidarity Bank) (Mali)
BRL	Brazilian Reals
BVCA	British Venture Capital Association
CFA franc	Currency of The African Financial Community (Central Africa)
CIS	Collective Investment Schemes
CVCA	Canadian National Venture Capital Association
DB pension	Defined Benefit Pension
DPI	Distribution to Paid-In
EASDAQ	European Securities Dealers Automated Quote System
EBAN	European Business Angel Network
EU	European Union
EUR	Euro
EVCA	European Private Equity and Venture Capital Association
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEM	Growth Equity Market (Hong Kong, China)
IADB	Inter-American Development Bank
ICT	Information and Communication Technology
ILO	International Labour Organisation
IP	Intellectual Property
IPO	Initial Public Offering
ISME	Innovative Small and Medium-sized Enterprises
IT	Information Technology

ITC	Information Technology & Communication
km	Kilometre
KOSDAQ	Korean Securities Dealers Automated Quotations
M&A	Merger & Acquisition
MFI	Microfinance Institutions
MFR	Minimum Funding Requirement
NASDAQ	National Association of Securities Dealers Automated Quotations
NGO	Non-Government Organisation
NVCA	(United States) National Venture Capital Association
NYSE	New York Stock Exchange
OECD	Organisation for Economic Cooperation and Development
P/E ratio	Price-earning ratio
PAPME	Agence pour la Promotion et l'Appui aux Petites et Moyennes Entreprises (Agency for the promotion and support of SMEs) (Benin Republic)
PE	Private Equity
PEIGG	Private Equity Valuation Guidelines
R&D	Research and Development
RCAP	Risk Capital Action Plan
RVPI	Residual Value to Paid-In
SME	Small and Medium-sized Enterprises
TVPI	Total Value to Paid-In
UCITS	Undertakings for Collective Investments in Transferable Securities
UEMOA	Union Économique et Monétaire Ouest Africaine (West African Economic and Monetary Union)
USD	United States Dollar
VC	Venture Capital
WKCI	World Knowledge Competitiveness Index
ZACA	Zambian Agricultural Commodity Agency

Executive Summary

Many commentators have postulated a “financing gap” for small and medium-sized enterprises (SMEs), meaning that there are significant numbers of SMEs that could use funds productively if they were available, but cannot obtain finance from the formal financial system. This report analyses the “financing gap” concept, seeks to determine how prevalent such a gap may be — both in OECD countries and non-OECD economies — and recommends measures to foster an improved flow of financing to SMEs.

SMEs and entrepreneurship are now recognised world-wide to be a key source of dynamism, innovation and flexibility in advanced industrialised countries, as well as in emerging and developing economies. They are responsible for most net job creation in OECD countries and make important contributions to innovation, productivity and economic growth. If the SME sector does not have access to external funds for investment, the capacity to raise investment per worker, and thereby improve productivity and wages, is seriously impaired.

The difficulties that SMEs experience can stem from several sources. The domestic financial market may contain an incomplete range of financial products and services. The lack of appropriate financing mechanisms could stem from a variety of reasons, such as regulatory rigidities or gaps in the legal framework. Moreover, development economists increasingly accept the proposition that, due to monitoring difficulties such as principal/agent problems (*e.g.* related to the shareholder-manager relationship) and asymmetric information, suppliers of finance may rationally choose to offer an array of financial services that leaves significant numbers of potential borrowers without access to credit. Such credit rationing is said to occur if: *i*) among loan applicants who appear to be identical, some receive credit while others do not; or *ii*) there are identifiable groups in the population that are unable to obtain credit at any price. Owing to their inherent monitoring problems, SMEs will be at a particularly severe disadvantage relative to larger and more established firms. SMEs’ difficulty in obtaining financing will be compounded when the business environment lacks transparency, when the legal system is weak, and when monopolies are present. As well, loan originators may avoid providing financing to certain types of SMEs, in particular, start ups and very young firms that typically lack sufficient collateral, or firms whose activities offer the possibilities of high returns, but at a substantial risk of loss.

In a competitive market, suppliers of finance have powerful incentives to overcome barriers to SME finance. In most OECD countries, banks perceive SME finance as an attractive line of business and thus have developed effective monitoring techniques. Whether any country experiences a financing gap will ultimately depend upon whether the business environment is sufficiently robust to enable borrowers and lenders to interact with confidence on an “arm’s length” basis.

How widespread the “financing gap”?

In order to determine how widespread the “financing gap” problem is, the OECD circulated a questionnaire to officials in all member countries as well as a large number of non-members (over 100 economies in all) to gain some insights into factors influencing the provision of financing to the SME sector. Twenty OECD countries and 10 non-OECD economies responded to this survey. Much of the information sought is of a qualitative nature, and thus, the survey results (see Annex C) along with related information (*e.g.* national surveys and development finance analyses), even with complete responses, permit only some tentative conclusions. The experience of OECD countries and non-OECD economies with SME financing gaps can be divided into three groups:

1. OECD countries do not report any generalised SME financing gap. Most SMEs in OECD countries are able to obtain sufficient credit from banks and other credit institutions, supplemented in some cases by a modest volume of official guarantees.
2. Most non-OECD economies by contrast report a widespread shortage of SME finance. Even though SMEs typically account for a large share of enterprises, employment, and output in many emerging and developing countries, they receive a very low share of credit, with the majority often being denied any access to the formal markets. This development is closely related to the phenomenon of “informality” in emerging markets in which many enterprises operate outside the formal system. There are three factors favouring informality: 1) established financial institutions are not interested in dealing with SMEs and, hence, there are few positive incentives to operate transparently; 2) entrepreneurs in SMEs seek to avoid regulation and taxation in the formal sector; and 3) governments lack the administrative capacity to enforce laws and regulations.
3. Most OECD countries perceive that a lack of appropriate financing has been a hindrance to the expansion of innovative SMEs (ISMEs), *i.e.* firms, often in technology sectors, with new business models and high growth prospects. In a small number of countries, the ISME sector has expanded significantly, with positive implications for employment and technological competitiveness, but it has lagged considerably in most OECD countries, producing a gap to which policy makers often attribute low job creation and sagging competitiveness. Many OECD countries consider this gap to be an important policy challenge.

Banking and credit

In most jurisdictions, commercial banks as a group are the main source of external finance for SMEs. Therefore, it is essential that the banking system be prepared to extend credit to the SME sector. However, there are number of rigidities of a macroeconomic, institutional and regulatory nature that may bias the entire banking system against lending to SMEs. Macroeconomic policies may lead to excess demand for available domestic savings, while government policy may favour industrialisation and/or import substitution, which effectively gives large domestic firms privileged access to finance. The legal system may not provide adequate protection for the rights of creditors and may be relatively inefficient in resolving cases of delinquent payments and bankruptcy. Additionally, the tax and regulatory framework may encourage firms to operate opaquely. Furthermore, the financial market may not contain the necessary range of products and services to meet the needs of SMEs.

The characteristics of the banking system in emerging markets frequently inhibit SME lending. In many cases, many banks are state-owned. Histories of substandard lending may leave many banks with weak balance sheets. Significant shares of total credit are often allocated on the basis of government guarantees or under special programmes to support targeted sectors. Banks may also be subjected to interest rate ceilings that make it difficult to price credit to SMEs in order to fully reflect the risk of lending to SMEs. In many countries, the authorities have been reluctant to allow banks to fail and the banking system was therefore supported by implicit or explicit government guarantees. Many banks may have ownership and other ties to industrial interests and, thus, tend to favour affiliated companies.

If the banking system has possibilities to earn acceptable returns by lending to other borrowers, it will not develop the skills needed to do SME lending. If the formal banking system shows little inclination to lend to SMEs, there is little incentive for firms to produce credible accounts and operate transparently.

On a global level, a model of market-based banking has gained acceptance under which banks' management and boards are accountable for achieving high returns to shareholders and maintaining high prudential standards. As this model is applied and as the business environment becomes more competitive, banks have stronger incentives to find means to overcome the difficulties in SME lending. However, many emerging markets have been comparatively slow in implementing this model, which may be reflected in low volumes in SME lending. Lending to the SME sector would still be, in any case, subject to agency problems and the phenomenon of incomplete markets.

The fact that SMEs in many emerging markets do not have access to credit financing is especially worrisome because SMEs typically employ a large share of the labour force and account for a large part of national income.

By way of contrast, banks in the most advanced countries are adopting strategies to reduce the risk of lending to SMEs. They are investing considerable resources in seeking to overcome information asymmetry problems by using credit scoring models and other sophisticated techniques to discriminate between high and low-risk borrowers. These lending mechanisms enable banks to identify businesses likely to survive and expand, and with which it is worthwhile to develop a long-term relationship. Banks are also altering the nature of their products. An increasing proportion of bank revenue now comes from fees for services, which favours lending to entities such as SMEs.

Governments of OECD countries are convinced that there are still enough instances of market failure in SME finance to justify government intervention. Thus, countries have launched a number of programmes to utilise public funds in order to facilitate SME lending. Official surveys at the national level, or on a cross-country regional basis, suggest that the efforts of banks to develop in the SME market, supported in some cases by a moderate amount of government guarantees, have resulted in a situation in which a large share of SMEs have access to bank finance. It is worth mentioning that in most cases the volume of funds supplied under official programmes is modest in comparison to that supplied by banks at their own risk.

Risk capital

Nonetheless, there are as noted previously still problems in directing funds to certain other categories of SMEs, particularly ISMEs. They include start-ups and very young

firms in all categories and those in riskier endeavours in particular. Providing adequate finance to such SMEs is a challenge in a broad range of countries. Traditional bank finance is of limited relevance to ISMEs, which usually have negative cash flows, untried business models and high risk. Instead, investors provide risk capital through equity and quasi-equity products (*e.g.* “mezzanine finance” and “hybrid products”). The investor can assume high risks, but may also reap large rewards. Unlike traditional listed equity investments, ISMEs will usually progress through several stages of private equity finance (*i.e.* not listed on stock exchanges or subject to full formal regulation) adapted to their special needs.

Geographic proximity is a factor in ISME development in the sense that investors need ongoing communication with technical innovation, innovative entrepreneurs and the marketing plans of competitors. Therefore, these investors, like the entrepreneurs they support, tend to locate near “technology clusters,” in areas near universities and other research facilities. The trend toward concentration is often reinforced by policies to locate “science parks” and “business incubators” near research facilities. Some of these facilities are supported only by private funds but most use public funds as well.

The ISME typically proceeds through several stages, from “seed” before production has begun through an “early stage” and then one or more “expansion” or “development”. ISMEs require a range of financing vehicles as they progress through the life cycle, and investment at any stage of the life cycle is frequently contingent on there being some potential to advance to the next stage. Initially, the company has no financial statements or track record, which limits its suitability for external financing. Consequently, funds are initially raised from close personal or professional acquaintances. Early-stage funding can also take the form of government funds such as grants or seed capital funds, which can be partnered with funds from universities, endowments and local authorities. These funds are mostly used for the development of product prototypes and feasibility studies.

“Business angels”, individuals who commit business experience as well as their own capital, often play key roles in the formative stages of a firm’s life. The role of business angels in early-stage finance appears to be growing and is increasingly recognised as a vital link in the financing chain. It is also an area where government technical support may have a very high payoff.

Venture capitalists, which often enter the firm at the middle to later stages of its life cycle, provide a link between the SME and institutional sources of capital. Funds are usually obtained from institutional investors, especially pension funds, but financial intermediaries and the corporate sector as well as the official sector are also major investors. At the end of the process the venture capitalist aims to realise a return on the investment through “exit” via trade sale or a public issue (initial public offering, *i.e.* IPO). While trade sales are much larger than IPOs in volume terms in almost all instances and places, IPOs are important in establishing valuation and in setting standards to which newer companies can aspire.

The sharply varying levels of SME sector development in OECD countries and worldwide make it imperative for those countries where development is lagging to review and reform their entire frameworks for entrepreneurial finance.

Conclusions

- Lack of data impedes a complete analysis of the financial situation of SMEs in OECD and non-OECD economies.
- Financing gaps are more pervasive in emerging markets than in OECD countries, but many OECD countries have financing gaps for ISMEs.
- The overall macroeconomic legal, regulatory and financial framework is the critical determinant of SMEs' access to finance.
- SMEs have significant gaps in information and skills needed to access external finance.
- The modern market-based model of banking is more likely to work to the advantage of SMEs than highly controlled banking that is closed to foreign competition.
- Emerging economies need to strengthen incentives for SMEs to move into the formal sector.
- An effective framework for research-commerce linkages is a critical precondition for effective ISME finance.

Recommendations

- Governments can play an important role in supporting the SME sector, in particular, in cases of market failures and incomplete markets that inhibit the provision of adequate financing or financing on terms suitable for the stage of SME development.
- Government measures to promote SMEs should be carefully focused, aiming at making markets work efficiently and at providing incentives for the private sector to assume an active role in SME finance.
- Public policy should improve awareness among entrepreneurs of the range of financing options available from official programmes, private investors, and banks.
- The principle of risk sharing should be observed, committing official funds only in partnership with those of entrepreneurs, banks, businesses or universities.
- The tax system should not inadvertently place SMEs at a disadvantage.
- Where necessary, banking systems should be reformed in line with market-based principles.
- Governments should determine whether the market for informal risk capital (often described as “business angels”) can be made to operate more efficiently through government technical support.
- National policies should encourage diverse forms of institutional savings and institutional investors should be regulated flexibly.
- The market for corporate control should be allowed to function efficiently for both domestic and foreign entities.
- The legal, tax and regulatory framework should be reviewed in order to assure that the business environment encourages the development of venture capital, including opportunities for exit.

Chapter 1

Financing SMEs: Is There a Gap?

Chapter 1 analyses on a general level the dominant theme of this Report, *i.e.* whether there is a theoretical justification for an SME funding gap, and then on a more practical level, how prevalent such a gap may be both in OECD and non-member economies. The study finds that there is indeed a possibility that firms in some countries may encounter a financing gap, but that this gap does not exist everywhere. It is very pervasive throughout the SME sector in certain countries (mainly emerging markets) and in certain sectors (very frequently in “innovative SMEs” or ISMEs). Since some countries and institutions have succeeded in surmounting this gap, this chapter will try to distil policy guidelines that may be applied as countries review their legislative and regulatory frameworks for SME finance.

Main conclusions and recommendations of Chapter 1:

- A lack of data impedes a complete analysis of the financial situation of SMEs in OECD countries.
- Outside OECD countries the scarcity of data is even more serious.
- Financing gaps are more pervasive in emerging markets than in OECD countries, but many OECD countries have partial financing gaps, especially in the equity sector.
- Analysis reveals not one but several kinds of financing gaps (*i.e.* generalised financing gap, equity gap, financing gap for high-growth or technology-based SMEs).
- The financing gap is by no means insurmountable.
- The overall legal, institutional and regulatory framework is the critical determinant of SMEs’ access to finance.
- SMEs have significant gaps in information and skills needed to access external finance.
- An appropriate mix of financial instruments and institutions that are available in a timely manner will enable the SME sector to realise its potential.
- Government should play a limited but well focused role in promoting SME finance.

Introduction and overview

The Report analyses the concept of a “financing gap”, seeks to determine how prevalent such a gap may be — both among OECD countries and non-OECD economies — assesses the various instruments to ease the SMEs’ financing constraints, examines the role of government intervention in SME financing and recommends measures to foster an improved flow of financing to SMEs.

Virtually all countries at all income levels have set a policy objective of assuring that SMEs have access to adequate financing. This high priority stems from the perception among policy makers that *i)* SMEs are of critical economic importance, and *ii)* the lack of finance in appropriate forms may be a serious barrier to the development of this sector.

An environment, supportive of entrepreneurship and a vigorous SME sector, is seen as manifestations of dynamism and flexibility throughout the economy. Moreover, in many advanced industrial countries, larger well-established companies only produce limited gains in employment. Therefore, the ability to generate employment depends to a large extent upon the prospects of smaller companies. In emerging economies, the need to stimulate SME growth is even more urgent due to the need to generate employment for expanding labour forces. Moreover, a sizeable share of the population already works in micro or smaller enterprises, often at very low wages. Frequently, these enterprises have only limited access to external finance, which might enable them to increase investment per worker. Thus, a crucial element in the effort to reduce poverty hinges on the capacity of SMEs to gain access to external finance.

Many commentators have asserted that there exists a “financing gap” for SMEs. There is no commonly agreed definition of this gap, but the term is basically used to mean that a sizeable share of economically significant SMEs cannot obtain financing from banks, capital markets or other suppliers of finance. Furthermore, it is often alleged that *i)* many entrepreneurs or SMEs that do not currently have access to funds would have the capability to use those funds productively if they were available; *ii)* but due to structural characteristics, the formal financial system does not provide finance to such entities.

While it is generally agreed that all SMEs have the potential to make a contribution to economic development, this report gives special emphasis to one sub-category of SMEs with strategic significance for economic performance. More specifically, SMEs with high growth potential play a pivotal role in raising productivity and maintaining competitiveness. Some analyses have emphasised SMEs in high-technology sectors. However, this paper will take a somewhat broader view and use the expression “innovative SMEs”, or ISMEs, to designate this category of firm, many of which are found in high-technology activities.

Another reason why ISMEs have aroused wide interest is that the degree of success in developing such firms differ strikingly among countries. Specifically, this sector has been extremely dynamic in the United States and in a handful of other countries, but has lagged considerably in many continental European countries and Japan. Many of the latter countries believe that the lack of dynamism in this sector has broad negative repercussions for employment creation and competitiveness. As this sector has lagged, so have the special financing arrangements associated with it. Several countries that do not perceive a general SME financing gap do believe, however, that there is an ISME financing gap. ISMEs have proven to be unsuited to traditional forms of SME finance such as bank credit and government guarantees programmes, and require special forms of

equity-related finance. Thus, many countries have introduced policies designed to foster the growth of this kind of enterprise, and many countries see the extension of finance to this category of enterprise as an urgent task.

Report overview

This report is divided into three main parts. Chapter 1 analyses on a general level the dominant theme of this report, *i.e.* whether there is a theoretical justification for an SME funding gap, and then on a more practical level, how prevalent such a gap may be both in OECD and non-member economies. The study finds that there is indeed a possibility that some countries may encounter a financing gap, but that this gap does not exist everywhere. It is found in certain countries (mainly emerging markets) and in certain sectors (very frequently in ISMEs). Since a number of private institutions and government policies have found ways to overcome this gap, this chapter will try to distil policy guidelines that may be applied as countries review their legislative and regulatory frameworks for SME finance.

Chapters 2 and 3 deal with banking and risk capital finance, respectively. Chapter 2 will deal with the banking and credit system. The goal of Chapter 2 is to identify the extent and nature of any financing gap that may be found in the banking and credit sector and to determine how this problem can be addressed. Subsequently, the chapter will detail the steps that entrepreneurs, financial institutions and governments can take to close that gap.

Chapter 3 will focus on risk capital, emphasising the one category of SMEs that has been identified as a challenge in a large number of countries: ISMEs. The report first identifies the special difficulties such companies present for investors. In brief, these companies present higher than average risk and uncertainty. Offsetting this risk is the possibility to achieve much higher than average returns. The chapter will discuss the contribution that risk capital markets (in particular business angels, venture capital and “growth” exchanges) can make to the financing of this sector. It will also discuss why development rates of dynamic SMEs and also of financing vehicles associated with the sector vary so widely among countries. Finally, this section will propose steps that entrepreneurs, investors and governments can take to stimulate development of risk capital. The chapter will also briefly address the issue of valuation and definition.

The financing gap

Is the concept of a financing gap meaningful?

On a theoretical level, there is some controversy as to whether it is meaningful to speak of a “financing gap”. Clearly, there can be such a gap if the authorities intervene in the market and maintain interest rates below the equilibrium rate, which would inevitably lead to excess demand for loanable funds. In the past, some analysts argued that it was not meaningful to speak of a funding gap unless the authorities actually kept interest rates below market clearing levels. It was held that as risks rise, providers of financial resources would sufficiently increase interest rates charged to all borrowers to bring the supply and demand for credit into balance.

This view was contested in a groundbreaking article by Stiglitz and Weiss (1981) who argued that in a market in equilibrium but with problems that are commonly found in

financial markets, it could be rational for banks to engage in “credit rationing”. Due to problems of asymmetric information and agency problems, banks have difficulties distinguishing good risks from bad risks and in monitoring borrowers once funds have been advanced. Moreover, banks will hesitate to use interest rate changes to compensate for risk in the belief that by driving out lower-risk borrowers, high interest rates may lead to a riskier loan portfolio, thus setting in motion a process of adverse credit selection. Banks could maximise their return by setting an interest rate that left large numbers of potential borrowers without credit. In the Stiglitz-Weiss formulation, credit rationing is said to occur if *i*) among loan applicants who appear to be identical some receive credit while others do not; or *ii*) there are identifiable groups in the population that are unable to obtain credit at any price. The issues raised in this article have generated a debate that has been part of the literature on development finance for more than two decades. Furthermore, the initial theoretical argument has been elaborated in succeeding years and applied in a number of different cases.

Leaving aside the theoretical details, the core of the argument is that suppliers of finance may choose (due to the problems of dealing with uncertainties such as agency problems, asymmetric information, adverse credit selection and monitoring problems) to offer an array of interest rates that would leave significant numbers of potential borrowers without access to credit. The argument was not specifically aimed at SMEs, but, as will be made clear below, the specific characteristics of SMEs are such that these problems are more severe in SMEs than larger companies.

The distinctive challenges of SME finance

Any potential provider of external debt or equity finance will want to monitor the company to determine whether it is acting in accord with the initial contract, to follow the progression of the firm and to have the means to oblige the user of funds to respect the interests of the provider of funds. There are numerous reasons why doing this effectively is more problematic for SMEs than for larger firms. Hence, banks are more likely to engage in credit rationing (*i.e.* not extending the full amount of credit demanded, even when the borrower is willing to pay higher rates) to SMEs than to larger companies (Stiglitz and Weiss, 1981; Hoff and Stiglitz.).

In the first place, the SME sector is characterised by wider variance of profitability and growth than larger enterprises. SMEs also exhibit greater year-to-year volatility in earnings. The survival rate of SMEs is considerably lower than that of larger firms. Thus, one analyst found that manufacturing firms with fewer than 20 employees were five times more likely to fail in a given year than larger firms (Storey, 1995).

In the case of SMEs, it is very difficult to distinguish the financial situation of the firm from that of its owners. The use of company cars and home accommodations for both private and business purposes are clear cases in point. Furthermore, estate tax and intergenerational succession are important issues in SMEs but usually unimportant for larger companies.

Relations between the firm and its stakeholders are likely to reflect personal relationships to a much higher degree than in larger firms where such relationships are formalised. Whereas large firms are expected to observe recognised standards of corporate governance in which actors such as executives, auditors, and boards of directors are expected to conform to transparent norms, SMEs tend to reflect much more closely the personalities of their owners.

The linkage between SMEs and financial markets is looser than in the case of larger companies. SMEs often obtain funds from informal sources and, thus, may be less linked to trends in the formal fixed-income or equity markets. SMEs often use internally generated funds or loans from family and friends in “quasi-equity form”. Funds from close acquaintances may be obtained at sub-market rates while borrowing from formal markets may be at rates higher than those available to larger companies.

Trade credit, *i.e.* credit supplied by non-financial entities, has always been an important component of SME finance and many analysts argue that the development of trade credit is an important element in assuring adequate finance for SMEs in emerging markets.

There are also potential principal/agent problems. The provider of credit will seek to require the borrower to act so as to maximise the probability that the loan is repaid, while the borrower may seek higher risk/higher return solutions. Once financing is received, the entrepreneur may be motivated to undertake excessively risky projects, since all of the upside of the project belongs to the entrepreneur, while the lender prefers a less risky project that increases the probability that the loan will be repaid. This problem, which is potentially present in all lending, is more serious for smaller firms than for larger firms because of the blurring of the line between the firm and the entrepreneur, and due to information asymmetries.

Asymmetric information is a more serious problem in SMEs than in larger firms. The entrepreneur has access to better information concerning the operation of the business and has considerable leeway in sharing such information with outsiders. However, the entrepreneur is also likely to have less training/experience in business than those in a larger company, although more adapted to operating in an uncertain environment. Hence, it may be difficult for the outside provider of financing to determine whether the entrepreneur is making erroneous decisions or for the outsider to understand the business adequately. In addition, the entrepreneur may have incentives to remain opaque, not only in dealings with financiers, but also with other outsiders such as regulators and tax authorities.

The analysis of credit rationing is believed to provide special insights into problems of finance in developing and emerging markets. Thus, this argument has become part of the analysis generally applied to problems of finance in emerging markets.

Structural rigidities and distortions will worsen the funding gap

The argument elaborated in the preceding section held that even in financial markets that have no distortion stemming from official intervention and major private monopolies, SMEs will often be more difficult to assess than established companies. Therefore, the possibility that large numbers of small firms will be excluded from the credit market, already present to some extent in a fully competitive and transparent market, becomes greater as market imperfections grow.

This initial disadvantage of SMEs can worsen if the business environment and the financial system have certain characteristics.

- 1) **The domestic savings investment balance.** National savings may be at low levels and may result in a chronic insufficiency of domestic savings with respect to domestic investment or lead to excess demand for available domestic savings. In addition, government policy may favour industrialisation and/or import

substitutions, which effectively give large domestic firms privileged access to finance. The hesitancy to lend to SMEs and the resulting credit rationing will become more acute in times of monetary stringency and disinflation.

- 2) **Legal, institutional and regulatory framework.** Banks will only seek to develop the SME market as a source of profit if the economic and business framework is calibrated to transmit reliable economic signals and the legal regulatory institutional setting enables banks to lend with confidence. The legal system should have a strong regime to protect property rights, including creditor rights and be relatively efficient in resolving cases of delinquent payments and bankruptcy. Additionally, the tax and regulatory framework should encourage firms to operate in a transparent manner. If these conditions are absent, the tendency to exclude SMEs from lending will be more pronounced.
- 3) **Structure of the financial system.** On a global level, a model of market-based bank governance has gained acceptance. Under this model, supervisors are expected to hold bank managers accountable for adequacy of earnings and for the prudential quality of their institutions while bank management and boards act to produce high returns to shareholders and maintain high prudential standards. This model has proven to produce significant efficiency gains. As this model is applied and as the business environment becomes more competitive, banks have strong incentives to find means to overcome the difficulties in SME lending. However some countries have been comparatively slow in implementing this model.

Emerging markets are particularly vulnerable to marginalisation of SMEs

The analysis of credit rationing was believed to provide special insights into problems of finance in developing and emerging markets. SMEs and informal enterprises are the largest providers of output and jobs in the developing world. Although reliable data on the size of the SME sector are lacking, not least because of widespread informal activity, the World Bank estimates that SMEs and informal enterprises account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute over 95% of total employment and about 70% of GDP in middle-income countries (Ayyagari, Beck and Demirgüç-Kunt, 2003).

A large body of research documents the existence of a skewed firm size distribution: a small number of large firms co-exists (even within the same sector) with many micro and small enterprises (Tybout, 2000; OECD, 2005). This ‘missing middle’ in the firm size distribution and the prominence of micro and small-sized enterprises would stem from a combination of cumbersome regulation – it never pays to be just large enough to attract enforcement – and structural characteristics related to a low level of development, such as underdeveloped markets, unsophisticated demand, and poor business environments.¹

Structural rigidities that create conditions under which large numbers of economically significant SMEs cannot obtain financing are more likely to be found in emerging markets than in more highly advanced economies. Emerging markets are more likely to have macroeconomic imbalances that lead to excess demand for available domestic savings as well as institutional weaknesses that encourage large numbers of individuals to engage in low productivity, informal activity. Furthermore, financial systems in emerging markets are often characterised by less deregulation, openness and reform of ownership

governance and supervision. There are persuasive reasons to believe that when the institutional and financial framework is weak, SMEs will be adversely affected to a much larger degree than larger firms.²

In many emerging markets, there is a clear trend for SMEs to shun the formal financial system and operate in the informal economy, aggravating their lack of access to financial markets. Schneider (2002) estimates that, in the average developing country, the informal economy accounts for 41% of official gross national income (GNI). In European OECD countries, the average is 18%. The ILO (2002) estimates that the informal workforce share of non-agricultural employment is as high as 78% in Africa, 57% in Latin America and the Caribbean, while it displays a high variation in Asia (between 45% and 85%) and much lower rates in OECD countries. This tendency to operate in informal markets frequently reflects both positive and negative forces. For instance, the formal banking system may show little interest in lending to SMEs and hence there is little incentive for firms to produce credible accounts and operate transparently. When entrepreneurs perceive a lack of willingness on the part of financial institutions to deal with SMEs, one of the key incentives for firms to move into the formal economy will be absent. The small firm will have additional incentives to remain involved in the informal economy if more transparent operating and disclosure practices would expose the firm to more official scrutiny, tighter regulation and/or higher taxation. As a result, many entrepreneurs conclude that their interests are better served by remaining in the informal system. A recent World Bank *Doing Business* report suggests that the burden of regulation in developing countries is considerably higher than in developed countries, and this may well be a cause for the unsatisfactory private sector performance and informality.

While the avoidance of formal channels for finance may to some degree reflect excessive taxation or bureaucratic rigidity as well as the disinclination of banks to lend to SMEs, it may also reflect the lack of institutional capability on the part of the authorities to enforce laws and regulations. When the informal economy reaches a substantial size and the accepted practice becomes to avoid taxes and regulations, the authorities may confront a problem of enforcement and compliance with laws and regulations.

The special case of ISMEs

There is one sub-category among SMEs that deserves special consideration, namely ISMEs. ISMEs, which are of strategic significance for economic prospects, function largely independently of the banking system. Moreover, even countries with no general SME financing gap may have serious gaps in financing ISMEs.

For the purpose of this document, ISMEs are defined as a particular subset of SMEs that seek to exploit innovation for growth and competitive advantage. These enterprises are distinguished from other SMEs by the intent of the entrepreneur who runs it and the scope for growth. It is likely that such an SME will embrace new technology or innovative methods in the process of delivering its product or service to the market. Unlike a more traditional SME that takes a tested product or service and is expected to arrive relatively quickly at a position of positive cash flow, a dynamic firm begins with a new concept that may embody a scientific invention or a new method of delivery of goods and services. Some analysts identify this sector with high-technology firms. This sector is not comprised exclusively of high-tech firms, but in practice a large share of ISMEs will be in high-technology endeavours. In fact, in certain OECD countries, new firms have played an important role in the process whereby research is undertaken on a

basic level and, subsequently, is supplemented by further market-oriented research, product modification and development and marketing. Small firms form a special link between the research laboratory and the market.

Many governments have concluded that 1) ISMEs generate sizeable gains in income, employment, exports and productivity; and 2) the availability of finance is a precondition for the foundation of such firms. In the past two decades, many innovations that have been instrumental in transforming economic life in information and communications technology and biotechnology originated with high-growth SMEs.

Whatever each country's success in financing SMEs in general, there is a place in the financing continuum for means to provide finance to companies having exceptionally high growth prospects, but also having very high risk stemming in part from untested scientific concepts and business models.

Traditional means of finance, such as bank lending, government guaranteed loans, and listing on traditional stock exchanges are only of limited relevance to this firm category, which usually have negative cash flows, untried business models and uncertain prospects for success. High-growth firms are ill-suited for debt finance, at least until the middle or later stages of their life cycle. Such firms rarely generate sufficient cash flow to service debt and their risk is too high to be suitable candidates for bank credit and other forms of debt financing.

The most successful means of providing finance to these firms has been through equity and quasi-equity products under which the investor can assume a large amount of risk, but can also reap very large rewards. However, traditional equity investments, based upon publicly listed companies operating in established regulatory frameworks, have limited applicability to the companies in question. A listed company frequently has diverse ownership with many investors buying and selling shares on an ongoing basis. They face strong legal disclosure requirements, and typically have established business models and follow mainstream models of corporate governance.³ ISMEs, instead, will usually progress through several stages of equity finance adapted to their special needs.

Main conclusions regarding the financing gap

A lack of data impedes a complete analysis of the financial situation of SMEs in OECD countries

Many countries assert that a financing gap exists, partly due to complaints from the SME sector about the availability or cost of financing. Such complaints should not be accepted without question. There is evidence that in some markets spokesmen for SMEs have complained of a shortage of financing, but subsequent investigation failed to substantiate this claim. It is important to have a balanced picture of the actual situation, but basic data is often absent that would enable analysts to make important assessments of the financing gap.

In many OECD countries, definitions of SMEs are not uniform. Moreover, many countries do not collect data by size of enterprise but, rather, by size of loan. In many countries, surveys of SME lending are not conducted at all. In other countries, they are not conducted frequently or at regular intervals. Reasons for rejections of loans are not always available. Some countries have begun to address this problem by introducing their

own national surveys. Countries such as the United Kingdom and Canada, which conduct such surveys regularly, have found the data to be useful in focusing policies.

The scarcity of data is even more serious outside the OECD countries

Numerous analyses have tried to identify and assess the relative importance of constraints to SME growth in emerging markets. Unfortunately, the lack of hard data on SME characteristics and performance makes such an exercise extremely difficult. Most analyses employ ‘soft’ data from firm surveys, asking respondents to rank various constraints. The most widely used source of information for this kind of exercise is the World Bank’s *World Business Environment Survey* (WBES), a major firm-level survey conducted in 1999 and 2000 in 80 developed and developing countries around the world and providing data for over 10 000 firms.

Access to finance is regularly cited as the most serious obstacle, with little variation among regions of the developing world. An additional fact corroborating the positive correlation between firm size and the severity of the credit constraint is the ease of access to bank credit reported by larger firms. According to the WBES data, the share of bank credit as a percentage of total financing is systematically lower for SMEs.⁴ Small firms rely proportionally more on non-bank sources of financing such as internal funds (savings, retained earnings, family networks) and the informal sector (money lenders). A recent survey on economies belonging to the Association of South Eastern Asian Nations (ASEAN) suggests that formal sector financing makes up less than 25% of overall funding needs. Only a small fraction of SMEs, between 3% and 18% depending on the country, have access to formal sector finance (ASEAN, 2005).⁵

Unlike surveys of lending in OECD countries, the data does not indicate the ratio of successful to rejected loan application by firm size. This would be useful for further analysis. Another problem with using these subjective measures of credit rationing involves the possibility that the general perceptions of other non-financial constraints (*e.g.* crime, corruption, etc.) influences attitudes regarding the assessment of financing constraints.⁶

Various analyses document the determinants and relative importance of the ease of access to financing and its costs. The interesting question here is whether firm size matters. The Inter-American Development Bank (IADB) conducts such an analysis for Latin America and the Caribbean region (2005). The econometric exercise lends support to the hypothesis that 1) the severity of the financial constraints decreases with a firm’s size; 2) various features of the business environment do have an impact on the ease of access to credit; and 3) some of these features, notably the enforcement of creditor rights, the existence of private credit registers and a higher degree of competition in the banking sector, have a more pronounced (positive) effect on smaller firms. Qualitative evidence from other developing regions broadly supports these findings (ASEAN, 2005; OECD, 2005).

The OECD survey of SME finance seeks to identify shortcomings in available data

In order to gain some insights into the situation among OECD member countries and non-OECD economies, the OECD developed a questionnaire on SME access to debt and equity finance, which was distributed to officials in OECD and non-OECD economies in December 2005. Although only 20 OECD countries and 10 non-OECD members replied,

the results of the completed questionnaires provide some support for the analysis and conclusions in this report (see Annex C).

Clearly, it is an important objective to improve the questionnaire in order to obtain more complete replies in the future and to have a fuller picture of the situation in OECD and non-OECD economies. This is particularly important since the financing gap is almost certain to be more serious in non-OECD economies than among members.

Financing gaps are more pervasive in emerging markets than in OECD countries

In most OECD countries, there seems to be little evidence of an overall scarcity of financing for SMEs. This conclusion first emerged from continuing surveys of SME finance undertaken in several countries. For example, the Bank of England Survey of SMEs in 2004 found that about 80% of SMEs use external finance, but most SMEs had not sought new external finance in the preceding three years. The reason for not seeking new external finance was the absence of need (Bank of England, Main Report, 2004). Only 11% of demands for credit were rejected and 19% received less than requested. Only 5% to 8% of SMEs were discouraged about the prospects for external finance.

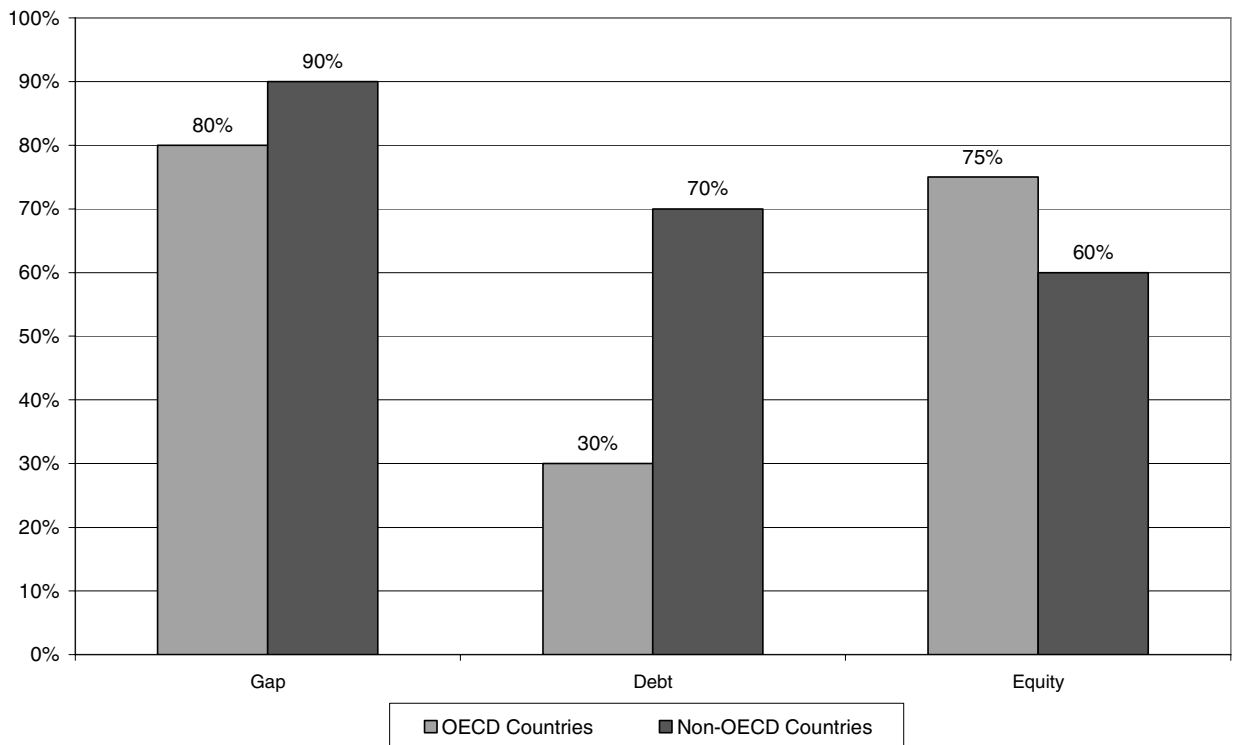
The Canadian Survey of Small Business Report arrived at similar conclusions. Most SMEs use external finance. In 2000, 82% of Canadian SMEs obtained their desired funding in 2000, and in 2001, when financing conditions were difficult, 74% still managed to obtain their desired funding. An EU survey shows that about three quarters of SMEs have sufficient finance.

Of course all of the surveys have inherent limitations. There is no control group for comparison and no surveys include potential entrepreneurs who fail to get started.

Although not all countries replied to the OECD survey, the results received thus far are consistent with the surveys already launched separately by some members (see Figure 1.1). In general, the OECD countries were cautious because many had not undertaken full-fledged surveys of SME finance. Nonetheless, most member countries did not report a pervasive SME financing gap. A partial exception was found in transition economies that are also OECD countries, who tended to report some reluctance on the part of banks to lend to SMEs due to lack of experience in making independent assessments of borrowers.

Many respondents cited asymmetric information as a source of difficulty for SMEs in obtaining finance. A few countries reported difficulties in raising capital on the part of very new companies. Japan and Korea noted that SMEs are likely to face strong demands for collateral. Some countries, for example Canada, saw a possibility that there may be some problems with specific groups such as women entrepreneurs and younger entrepreneurs.

This relatively benign situation can be contrasted with that reported by Turkey, which shares many characteristics of emerging markets. Turkey notes a very low share of SMEs in total credit. Reasons cited include high borrowing by the public sector, negative attitudes of banks toward SMEs, negative attitudes of SMEs toward banks, and lack of information on availability of finance and unreliable accounts of SMEs. Although the rate of replies from non-OECD economies was low, the responses received appear to confirm the impression that there is a widespread problem of SME access to finance.

Figure 1.1. Is there a financing gap? Where is the gap?

Note: In many cases of debt in OECD countries, this problem is limited to a sub set of SMEs, mostly start-ups and very young firms. See Annex C for further details.

But many OECD countries have partial financing gaps, especially in the equity sector

Although there do not appear to be general problems regarding SME access to adequate funds, many OECD countries perceive there to be limited financing gaps. The most commonly cited reason for not requesting additional financing was lack of need. In reply to the OECD survey, Italy concluded that, for the most part, the majority of SMEs are able to obtain bank credit for their financing needs, but that many SMEs tend to rely excessively on debt and that better access to equity finance may well have a salutary effect on SMEs in Italy.

Problems in obtaining equity finance were especially acute in the case of fast-growing companies, start-ups and high-technology firms. This problem was identified as a constraint to ISME growth in a large majority of countries.

Analysis reveals not one but several kinds of financing gaps

Based on the preceding analysis, national experiences regarding “financing gaps” can be grouped into four categories:

1. In some countries, there is a general problem as the SME sector has been unable to obtain sufficient financing due to structural weaknesses in the financial system. This may reflect a fundamental malfunctioning of the financial system. In particular, there may be many SMEs that typically do not obtain financing from the formal banking system, which is geared to providing credit to larger enterprises or to the public sector.

In such situations, the SME sector often relies on internal cash flow or on credits from informal sources. This situation is frequently present in emerging markets. In such cases, SMEs may account for a substantial share of output and employment, but activities remain concentrated in smaller family-owned companies embodying relatively low technology, with limited growth potential and relatively low investment per worker, and having few prospects to increase investment by the injection of outside capital or to be transformed into high-growth SMEs. In other words, rather than acting as a source of dynamism and introducing innovative techniques as in many leading economies, the SME sector tends to operate on the periphery of the formal economy and support low productivity or subsistence activities. Thus, SMEs cannot realise their full potential to provide attractive economic opportunities.

2. In many countries, SMEs have generally not shown dynamic growth and rates of enterprise formation tend to be low. Alternatively, SMEs may have adequate access to credit-based finance, but reliance on equity is limited. This situation may reflect economic characteristics that encourage debt financing, while discouraging the use of capital markets. Such countries are said to be bank-dominated or to lack an “equity culture.” Such systems are often found in continental Europe. It is not always evident whether reliance on banks has any deleterious impact on economic performance or whether greater reliance on equity would provide better results. In any case, there is a trend in most economies to use increasingly capital markets and to rely less on banking systems. In this case, a mix of reforms in the overall economic environment and in the programmes for SME finance will be needed.
3. In other countries, the SME sector may account for a large share of activity and the level of income in SMEs may be comparable to that of larger companies. Despite the aggregate satisfactory performance of all SMEs, the country may lack dynamic SMEs, notably in high technology sectors, that are able to enhance competitiveness and assist in the development of cutting-edge technologies. In such cases, it is a policy objective to develop high-growth SMEs. There may be no need to develop policies to introduce broad reforms in the financial sector or policies to support SMEs generally, but a more focused need to develop targeted policies for high growth SMEs may be in order.
4. A small number of countries have very positive records in achieving growth in developing techniques that favour the emergence of SMEs with high growth potential and those in high technology sectors. The experience of countries in this category can assist other countries in designing more effective policies. In addition, countries at the cutting edge must constantly review their own practices, since they are subject to competition from newcomers.

The financing gap is by no means insurmountable

In the preceding sections it was argued that there is a serious risk that a financing gap may arise and that the risk is higher in emerging markets than in OECD countries. However, these arguments should not be interpreted to mean that a funding gap is unavoidable. Indeed, there is ample experience that market participants over time have been rather adaptive in devising techniques that enable the financial market to manage the problems that lead to financing gaps. The data collected from the survey, while incomplete, tentatively support the conclusion that OECD countries generally have been able to provide adequate financing to most SMEs. With the proper incentives and an appropriate legal and regulatory framework, financial institutions will identify SMEs as a potential source of profitable business and will devote resources to dealing with the

opacity and agency problems that might have initially inhibited banks from lending to SMEs.

The overall legal, institutional and regulatory framework is the critical determinant of SMEs' access to finance

In many countries, uncertainty in the legal and regulatory environment is often identified as a cause of hesitancy to lend to SMEs. In order for a credit market to function properly, prospective lenders must have confidence that information about potential borrowers can be obtained and that the legal system will be robust enough to support “arm’s length” relations between lenders and borrowers. However, partly due to weak accounting standards, creditors often have difficulties in obtaining reliable information about prospective borrowers. Furthermore, the absence of information sources such as credit bureaus and rating agencies worsen the problems related to lack of relevant information. The legal protection of creditors is often weak and access to collateral in cases of default often doubtful. In many countries, bankruptcy procedures are known to be uncertain and lengthy. Indeed, reforms in bankruptcy regimes are often a key to increasing the willingness of banks to lend to SMEs.

SMEs must have incentives to produce transparent accounts that banks and other financial intermediaries can use in ascertaining the real financial condition of prospective borrowers. If such conditions are absent, banks will tend to avoid SMEs even if borrowers in that sector are able to devise otherwise “bankable” projects and are prepared to pay interest rates that reflect the risks associated with SME lending. In assessing the total environment for conducting business, the World Bank uses a business environment index (WBEI) in which countries are scored on their general business climate. The variables that are seen to be most relevant to the business environment are: a) property rights protection, b) contract enforcement, c) cost of entry regulations, and d) efficiency of the bankruptcy system.

In many emerging markets, there is a marked tendency for SMEs to operate in the informal economy. When entrepreneurs perceive a lack of willingness on the part of financial institutions to deal with SMEs, one of the key incentives for firms to move into the formal economy will be absent. The small firm will have additional incentives to remain outside the formal economy if more transparent operating and disclosure practices would expose the firm to more official scrutiny, tighter regulation and/or higher taxation.

When the informal economy reaches a substantial size and the accepted practice becomes to avoid taxes and regulations, the authorities may confront a problem of enforcement and compliance with laws and regulations. The majority of private market participants may conclude that there is little possibility to receive financing through formal channels, that taxes are excessive, and regulations are arbitrary and, finally, that the state lacks adequate power to enforce its regulations or to collect taxes.

SMEs have significant gaps in information and skills needed to access external finance

In all countries, surveys of SMEs indicate that deficient information about financing options constitutes a barrier to finance. Even entrepreneurs with considerable expertise in their own specialities often lack knowledge about the possibilities to obtain financing for their companies. Banks and investors offer an array of products with which entrepreneurs may have only cursory familiarity. The owners of the firm may not be fully aware of the

implications for the firm's cash flow that some types of credit may entail or of the implications for control of the firm implied by various forms of equity. If the entrepreneur were to reveal this lack of familiarity to the banker, it would undermine the credibility of the management of the company. Even in countries where banks have made significant strides in narrowing the SME financing gap, this divergence in viewpoints is serious.

There is often a contrast between SMEs that complain of a lack of availability of finance on appropriate terms and the prospective lenders or investors who simultaneously complain of a dearth of "bankable" or "investment-ready" projects. Frequently, the entrepreneur lacks familiarity with many aspects of finance as well as the capability to articulate a business plan that meets the requirements of the bankers or investors. Research shows that, even in markets where banks have targeted the SME sector as one with high profit potential, SMEs frequently do not "shop around" to compare alternate sources of finance, while bankers and investors have difficulty obtaining relevant information about borrowers. Where a climate of lack of information and mutual suspicion between SMEs and banks prevails, there is likely to be an even more serious deterrent to credit expansion. Bridging the information divide between entrepreneurs and financiers can be an appropriate place for the official side to facilitate the functioning of markets.

An appropriate mix of financial instruments and institutions that are available in a timely manner will enable the SME sector to realise its potential

An efficient system of SME finance is one that enables SMEs to have access to the full range of financial services suited to their own special circumstances. The great majority of SMEs in all countries depend mostly upon bank finance, usually supplemented by a small number of well-targeted government support programmes. Therefore, the effort to erase the financing constraint for SMEs in countries where it exists must begin with banking. The solution is not to have massive government programmes to channel resources to SMEs. SME access to the banking system will be improved mainly through reforms in the overall business environment and in the banking system supplemented by well focused programmes in the domain of SME financing.

While the lack of bank finance can be an obstacle to SMEs in some markets, the domination by banks and the lack of access to non-bank finance can also be an obstacle to progress. A number of OECD countries, as well as many non-members, have noted that SMEs have tended not to use equity finance extensively and to have capital structures that rely excessively on debt that are not conducive to outside investment. The predominance of closely held opaque firms with closely held ownership structures can be a reflection of the lack of willingness of certain firms to share ownership with outside investors. It can also reflect fiscal incentives that favour debt over equity finance, policies that impede the development of a market in corporate control, and a lack of institutional investors who can provide equity finance to domestic industry. The lack of capacity of domestic SMEs to have more extensive recourse to equity finance can also be a consequence of policies that prevent alliances with foreign partners due to barriers (intentional or unintentional) to foreign direct investment.

The most widely perceived gap among OECD countries is in the financing of ISMEs. Even countries with large numbers of new firms being founded and no identifiable problems with SME finance report difficulties in launching an adequate number of ISMEs and in providing suitable forms of finance to such entities. This category of firm

has proven to be the most resistant to official measures encouraging development. Ideas about how government can best contribute to the development of this sector will be analysed in Chapter 3.

Government promotion measures should be carefully focused

The foregoing discussion suggests that government should play a limited but well focused role in promoting SME finance. The primary role of government is to act as a catalyst by creating conditions that enable market participants to interact productively. To the degree that government intervenes directly in the market, it should cause a minimal distortion of market signals.

The first and most important function of government is to create a proper environment for entrepreneurship and for entrepreneurial finance. Regulatory and bankruptcy policies should be reassessed in the light of the need to enable entrepreneurs to accept risk. The accounting, fiscal and regulatory systems should encourage businesses to operate openly rather than in the informal economy. Government has the responsibility to make sure that the legal and regulatory framework enables bankers and entrepreneurs to deal on the basis of informed risk management with the assurance on all sides that lenders can reasonably expect protection in cases of bankruptcy.

The tax system should be supportive of risk taking. Most countries provide some tax incentives for investment in SMEs, particularly those engaged in high technology activities. Tax preferences may be used in some cases as an instrument to overcome market failures and distortions, but it is more important in the longer term to have a neutral and transparent tax system that does not take a punitive approach toward capital gains and other forms of entrepreneurial income. Tax policy should enable the government to achieve its revenue aims while leaving reasonable reward for risk taking.

The preceding discussion has made it clear that, when properly structured, markets will operate effectively to deliver financial services to SMEs. Government policy should focus on making it possible for markets to accomplish this task rather than try to supplant markets. It has been made plain that serious obstacles to SME finance often arise from lack of information on the part of entrepreneurs who often do not understand the range of available financing opportunities and on the part of bankers who have difficulties obtaining reliable information on borrowers.

The basic role of government in SME finance is to minimise instances of market failure. Market failure can occur in the SME sector due to the lack of information, either on the part of entrepreneurs or of those contemplating the financing of SMEs. One policy objective can be to provide non-financial support to improve information flows among market participants. Government information campaigns including written material, counselling, and use of information technology can help improve information flows. In addition, initiatives such as business parks and incubators often help companies gain access to information and technical support, such as the services of lawyers, accountants and consultants. Such facilities are often operated in partnership with key stakeholders, such as banks, stock exchanges, local authorities, universities and large businesses.

In addition to enabling private market participants to operate among themselves, governments should provide direct financial support either through loan guarantees or equity participations. Experience shows that government is ill-equipped to become deeply involved in the selection of projects. Moreover, while government guarantees can be useful in leveraging private funds, it is a mistake to transfer all of the risk from the firm or

the banks. Policies that remove all risk from providers and entrepreneurs distort market incentives seriously. Instead, there must be a sharing of risk among entrepreneurs, lenders, and government. Bankers consider it essential that the owners of the firm must place some of their own funds at risk in order to better align the interest of the bank to that of the borrower.

While SME owners often complain about high financing costs, credit policies must seek a proper balance between risk and reward so that defaults remain at an acceptable level. In the end, financing must take place at rates that providers of credit find attractive and competitive with those paid by other borrowers.

The amount of resources extended to SMEs should be kept under control. The experience of most OECD countries is that programmes to extend loans and guarantees to SMEs should not consume a large amount of budgetary resources. Most OECD programmes use stable amounts of funding resources and agencies engaged in SME financing are expected to be self-sustaining. The programmes are expected to observe commercial terms of discipline and to take action against delinquent borrowers similar to those taken by private institutions. Rates charged to borrowers should be sufficient to cover costs, including the costs of credit losses.

In summary, a set of guiding principles underpinning a successful regime of direct financial support to SMEs should include the following:

1. Emphasise policies that make markets work more efficiently.
2. Share risk between private lending institutions and the public sector.
3. Allow private suppliers of funds to engage in project screening.
4. Provide financing at market terms.
5. Ensure the programme is self-financing.

Notes

1. Tybout (2000) mentions four driving forces at work. First, low urbanisation combined with underdeveloped infrastructure creates diffuse pockets of demand that favour small-scale, localised production. Second, low purchasing power skews demand towards simple consumer goods that can be produced using cottage technology. Third, lack of skilled labour (including technicians) and access to long-term finance, combined with unavailability of domestic intermediate and capital goods and sometimes complex import procedures, lead firms to economise on fixed-capital and prefer labour-intensive, small-scale production. Finally, volatility of the business environment discourages investment in mass-production techniques, which require long-term commitment to a particular product and production technique. He concludes that, in many developing countries, the main manufacturing sector problems are not the limited contestability of markets, but rather the uncertainty about policies and demand conditions, poor rule of law, and corruption.
2. Research undertaken at the World Bank and the University of Maryland indicates that in cases where the legal and financial systems are weak and where corruption is relatively high the SME sector is disproportionately affected. See Beck, Demirgüç-Kunt and Maksimovic (2002).
3. Recognising the need for standards of corporate governance adapted to the specificities of certain non-listed companies, the European Venture Capital Association (EVCA) issued a set of standard guidelines for reporting to investors (EVCA, 2000), which was recently complemented by corporate governance guidelines for the private equity and venture capital industry (EVCA, 2005b).
4. See IADB (2005), chapter 14 on this point for Latin America.
5. Donor agencies also contribute, often through partner governments' facilities, significant SME financing, especially in those less-advanced developing countries with low levels of banking intermediation and unsophisticated financial markets.
6. Ayyagari *et al.* (2006) regress firm growth rates on the different obstacles they report. They find that only three obstacles, namely 'financing', 'crime' and 'political instability', are true constraints, or first-order constraints, significantly and directly affecting firm growth. Other obstacles such as corruption, judicial efficiency or infrastructure "may also affect firm growth through their impact on each other and on the three binding constraints; however, they have no direct effect on firm growth" (p. 17). Even after controlling for endogeneity (*i.e.* that low-growth firms are more likely to face more severe financing constraints), they find that 'financing' is one of the most important obstacles that directly constrain firm growth. Amongst the various sub-components that make up the 'financing' constraint, only a few are statistically significant, including, for instance, high collateral requirements, cumbersome paperwork, high interest rates and the need for special connections. Most of these obstacles are likely to be correlated among each other and reflect deeper macro-economic policy and institutional weaknesses.

Chapter 2

Banking and Credit

Chapter 2 will deal with the banking and credit system. The goal of Chapter 2 is to identify the extent and nature of any financing gap that may be found in the banking and credit sector and to determine how this problem can be addressed. Subsequently, the chapter will detail the steps that entrepreneurs, financial institutions and governments can take to close that gap.

Main conclusions and recommendations of Chapter 2:

- Businesses at different stages of development will require different types of finance.
- Excess liquidity or over-capacity in banking often induces banks to cut their lending rates to unprofitable levels and rely, instead, on fees from ancillary business from the borrower to fill the gap. However, in reaction to tighter monetary policy, slowing economic conditions, or a drop-off in loan quality, banks will typically tighten their underwriting standards. In the case of serious capital pressure, banks may begin to extend fewer new credits or actually cut their balance sheets by calling outstanding loans, as a means of boosting profitability and capital cushions.
- Theory suggests that this response on the part of banks may be perfectly rational.
- In order for banks and other financial intermediaries to ascertain the real financial condition of prospective SME borrowers, there must be incentives for SMEs to produce transparent accounts or some other means of disclosure.
- A key challenge for policy makers is to put in place a policy mix that avoids macroeconomic imbalances and financial sector vulnerabilities that can thwart the growth process.
- Governments should address imbalances in the wider macroeconomic environment.
- Then, design a system of SME financing that advances the objective of facilitating access of SMEs to financing.

Debt financing of SMEs

Introduction

SMEs constitute the dominant form of business organisation worldwide, accounting for over 95% and up to 99% of the business population depending on the country. For instance, in 2003, 99.8% of enterprises in the EU were SMEs (<250 employees). At the higher end of the scale, small firms constitute 99% of manufacturing enterprises in Italy, and close to 80% at the lower end for the United States (see definitions and tables in Annex B). SMEs form a broad spectrum as far as their relative size, sector of activity, seniority, location and performance are concerned. They can be innovative and growth-oriented (only a small subset) or basically subsistence-driven. Depending on the enterprise's characteristics and stage of business creation and development, the financing needs and sources (*e.g.* family, banks, equity, etc.) are likely to differ.

It is perhaps not surprising, given the diversity of small business operations, that the economic circumstances in which owners find themselves and the conditions under which they seek external finance vary considerably. Numerous factors affect a small firm's financing decisions and, in turn, its financial structure. Some factors that are inherent in the institutional environment affect all firms operating in the country, while others reflect the preferences of credit suppliers and the entrepreneurs themselves (Baldwin, *et al.*, 2002; Hughes, 1997).

For example, some entrepreneurs are reluctant to cede control and dilute their ownership share through equity financing and prefer instead to rely either on internal resources or some form of debt financing. At the same time, debt is generally considered not to be an appropriate form of financing for innovative SMEs, or other entities with projects characterised by higher risk-return profiles, at least not during the early stages when revenue generation and profitability are still at best uncertain and as debt servicing necessitates regular payments of interest and principal. After an innovative SME matures, it becomes a more suitable candidate for debt financing, or for hybrid debt-equity arrangements such as mezzanine finance. As a general rule, businesses at different stages of development will require different types of finance. The evidence is mixed, but it is widely believed that for some types of small businesses, the most appropriate options are not always available.

This chapter looks at factors affecting the provision of debt finance to SMEs, discusses some of the major difficulties in the SME lending environment, and highlights mechanisms that have been developed to address them.

SME finance in the broader economic context

The factors that influence the growth and development of SMEs can be grouped into four categories: *i*) macroeconomic environment, *ii*) financial environment, *iii*) entrepreneurial business environment, and *iv*) microeconomic environment. They are discussed each in turn.

Macroeconomic environment

There can be wide variations in the development of the SME sector, not only across countries, but within countries across different industry sectors and geographic regions. Distinctions may be drawn among developed economies, so-called emerging economies

or economies in transition, and countries still in the initial stages of development. For all countries, a proper macroeconomic environment with open and competitive product and financial markets, along with effective systems of labour and social protection to encourage flexibility are important conditions for the development of the SME sector. In general, for less developed economies, low inflation and stable exchange rates are necessary components of a macroeconomic environment favourable for risk taking on the part of entrepreneurs.

A key challenge for policy makers is to put in place a policy mix that avoids macroeconomic imbalances and financial sector vulnerabilities, which can thwart the growth process. Large fiscal imbalances, for example, in combination with easy monetary policy can hamper efforts of macroeconomic stabilisation by stimulating a rapid expansion of domestic credit, albeit with some crowding out of credit to the private sector, and generally constraining the use of fiscal stabilisers to respond to exogenous shocks. Often in such cases, tighter monetary policy eventually forms the core of efforts to avoid inflationary pressures and pressures on the exchange rate in order to forestall a loss of confidence on the part of domestic and foreign investors.

Which sectors bear the brunt of the more restrictive stance of monetary policy depends on several factors, including the degree of competition and foreign bank penetration in the banking sector, the depth of financial markets, and the availability of non-bank sources of credit. The most likely channel through which tighter monetary policy is transmitted to the economy at large is via higher lending rates. However, depending on the banks' customer base and the latter's access to other sources of financing, banks may be constrained, in some cases, in their ability to use higher interest rates. Instead, banks may be inclined to rely in part on tighter standards and terms of loans (*i.e.* the credit channel).

This scenario is quite common in the commercial lending business. Excess liquidity or over-capacity in banking often induces banks to cut their lending rates to unprofitable levels and rely, instead, on fees from ancillary business from the borrower to fill the gap. However, in reaction to tighter monetary policy, slowing economic conditions, or a drop-off in loan quality, banks will typically tighten their underwriting standards. In the case of serious capital pressure, banks may begin to extend fewer new credits or actually cut their balance sheets by calling in outstanding loans, as a means of boosting profitability and capital cushions.

The steps taken by banks typically entail both price and quantity changes. Some borrowers are offered the same amount of credit but at a higher price than before, while other borrowers are offered less credit. The purpose of this risk retrenchment by banks is to reduce expected bankruptcy costs and lower their own funding costs.

Theory suggests that this response on the part of banks may be perfectly rational. Stiglitz and Weiss (1981) first raised this point in their seminal article that presented arguments on why banks would be reluctant to rely on higher interest rates to address risks above their comfort level. In particular, the authors showed that in a market otherwise in equilibrium, but characterised by asymmetric information, it may be rational for banks to engage in credit rationing of the sort whereby some borrowers are denied access to credit regardless of their willingness to accept more stringent terms. The rationale is that by relying solely on the rationing effects of higher interest rates, banks may succeed only in driving out higher quality borrowers, leaving behind a riskier loan portfolio (*i.e.* adverse selection).

The impact of a contraction in bank lending would likely be greater in venues in which banks held a larger share of the total credit market and where the substitutability between bank and non-bank sources of credit is low. As well, for reasons that will be discussed below in more detail, the credit channel is of particular relevance with respect to credit availability for SMEs.

While inflation may lead to greater instability of real interest rates, the experience of a large number of countries suggests that this process of disinflation may be equally painful. In the process of de-inflating the economy, real interest rates are often driven to high levels. As a consequence, firms that would otherwise be financially viable in normal times may be unable to sustain the high interest charges and may find it necessary to withdraw from financial markets. If alternative sources of financing are not available, the viability of the business itself may be threatened. In short, macroeconomic inconsistency raises interest rates and shortens financing horizons.

Somewhat different problems emerge when policy attempts to hold interest rates below market clearing levels. Such a policy has often been implemented in countries with high inflation, where nominal rates may have been high, but where real interest rates have been volatile and at times negative. Problems of this sort affect the balance between domestic savings and investment. National savings may be at low levels and there may be a chronic insufficiency of domestic savings relative to domestic investment. Many countries have pursued policies that have tended to foster consumption over investment, while the range of savings and investment instruments available to the public has not been attractive. In some cases, unrealistic exchange rates exacerbate the problem of excess demand.

Other problems on the macroeconomic front also affect the SME lending process. Government policy may tend, for instance, to favour companies operating in particular sectors of the economy, sectors in which SMEs as a group may be under-represented. Many countries have pursued policies of industrialisation or import substitution that have had the effect of giving larger domestic firms privileged access to finance as well as to other government-sponsored benefits such as licences and protection from imports. In Brazil, for example, *Banco Nacional de Desenvolvimento Economico e Social (BNDES)*, the national development bank, was created to correct market distortions and channel public funds to disadvantaged sectors. So far, however, its credit allocation policy has been biased towards large enterprises. For instance, in 2003, over 90% of BNDES credit grants were directed to large industries (Table 2.1).

Table 2.1. BNDES credit grants by industry

Sector	BRL billions 2002	% 2002	BRL billions 2003	% 2003
Transformation industry	17 428.0	100.00	16 094.7	100.00
Small-sized industries	600.8	3.45	792.3	4.92
Medium-sized industries	708.6	4.07	780.8	4.85
Large-sized industries	16 118.6	92.49	14 521.6	90.23

Source: OECD, 2006

The combination of a limited supply of domestic savings, excess demand, and policies that have the effect of giving larger enterprises privileged access to those savings, will generate an excess demand for financing, which will be perceived as a financing gap when viewed from the perspective of a SME.

It should be noted, however, that not all cases of aggressive industrial policy and heavy government involvement in the distribution of credit result in financing gaps of this sort. Many countries in Asia, for example, have pursued policies of government-led export promotion, while often pursuing low interest rate policies. In cases of excess demand for credit, government acted as the final arbiter. In some cases, large domestic industrial interests have been the leading exporters, but in others, export development has been led by SMEs.

However, the experience of dynamic Asian countries has been mixed. As a group, most tended to have high domestic savings ratios and policies toward urban/rural prices and the exchange did not encourage a migration into the informal urban sector to the same degree as in many other emerging markets.¹ Thus, in most cases, they managed to avoid the pattern prevalent in many emerging economies whereby individuals engage in low productivity self-employment owing to a lack of opportunity in the formal sector (*i.e.* they pursue “necessity-based entrepreneurship”). In a recent analysis of Asian economies with long-term records of high savings and export-led growth, there did not appear to be an SME gap.

Nonetheless, although the record of Asian economies is better, on balance, than that of most emerging markets, there are cases where SMEs have limited access to financial resources flowing through the financial system. In China, for example, national savings are extremely high and the public holds large amounts of bank deposits as well as a significant amount of equities. However, most resources from the formal markets have tended to flow to state-owned enterprises, while the private sector, which has actually been the source of dynamism for the past two decades, has had to rely more or less on informal channels for financing.

Financial environment

There are important interlinkages between the macroeconomic environment and the financial sector. Financial sector development depends importantly on a sound macro-policy environment. By the same token, a well-functioning financial/banking sector is a necessary ingredient for macroeconomic stability. In this context, the overall legal and regulatory settings in which firms and their financial service providers operate can be shown to have a decisive influence on the development of the SME sector.

In general, economic growth requires that economic resources are reallocated from activities that are no longer profitable to more productive uses. Various factors can undermine the efficiency of the process, including a weak legal infrastructure, governance problems in the financial system, especially problems involving banking organisations, and the existence of well-placed vested interests that prompt political intervention. Such intervention can serve to keep loss-making firms alive too long and hamper the shift of resources to more profitable new ventures. In addition, costly, drawn-out and possibly corrupt insolvency procedures create strong disincentives for banks and other creditors to initiate bankruptcy proceedings, which may allow troubled firms to continue to accumulate losses.

The protection of creditors’ rights is, of course, of particular importance in the case debt finance. Sometimes things go wrong and sometimes quite badly. When they do, the interests of the creditors will be in conflict with those of business owners and other stakeholders. Orderly, equitable, and transparent exit procedures are necessary for an

efficient allocation of resources, often from older, less productive firms to newer, more innovative entities.² This process has important implications for SMEs.

Various transactions and information infrastructure are needed to support financial activities and the entire process is influenced by the legal and regulatory system, supervision, tax laws, societal and industry norms and other environmental factors. Financial transactions, for instance, depend crucially on the enforceability of contracts, preferably at a low cost and with minimum delay. This enforceability derives from the legal and regulatory system, its institutions, procedures, and rules. Of particular relevance to the discussion, in addition to contract law and insolvency law, are property law, securities law, laws governing consumer and investor protection, and laws on security interests (*i.e.* collateral liens). The basic laws and their enforcement in this latter area directly affect the ability of banks to deploy specific contracting elements that can be used to mitigate information problems, such as covenants, maturity, collateral (*e.g.* Berlin and Loeys, 1988; Chan and Kanatas, 1985; Sharpe, 1990). A country's commercial law on security interests (collateral liens), for example, is especially important in determining the efficacy of collateral in a loan contract. Key issues include whether the law clearly defines the conditions under which a collateral lien can be perfected,³ how collateral priority is established, and how notification of a lien is made. All of these elements are necessary for the efficient functioning of the financial system.

Depending in part on the legal and regulatory environment outlined above, various types of institutions may provide lending and other intermediation activities, including commercial banks, savings banks, postal savings institutions, savings co-operatives, credit unions, securities firms, collective investment schemes, finance companies, leasing companies, and others. However, not all of the entities in the above list operate in all jurisdictions or at least not to the same extent.

Although financial institutions are major conduits through which the financial assets of the ultimate savers are transformed and passed through to the liabilities of the ultimate users of funds, they make extensive use themselves of financial markets to achieve their goals. Financial markets, in turn, operate on the basis of various bilateral and multilateral contractual arrangements between suppliers and users of funds, most often affected via purchases and sales of securities.⁴

All financial system architectures are a matrix of these few basic components: savers and investors, financial infrastructure, financial regulation, and financial institutions, although the specific types of entities that are included in the financial institution sector and the role that these intermediaries play in the economy tend to vary according to historical situations and differences.⁵ Financial instruments (products and services) and the markets on which they are traded complete the landscape.

These elements are necessary components of an efficient functioning of the intermediation process in general, but may be of particular importance in the case of SMEs. In the first place, there are a few inherent difficulties (asymmetric information, agency problems, high costs) in lending to SMEs. These problems may, as noted in the section on the macroeconomic environment, be aggravated by other problems, such as crowding out by other, presumably less problematic users of finance or by structural obstacles that inhibit the extension of credit to the SME sector.

Certain characteristics of the financial system can serve as deterrents to financing the SME sector. In advanced economies, a model of market-based bank governance has gained prominence in which bank management and boards of directors act to produce adequate returns to shareholders, while market discipline and the watchful eyes of

supervisors ensure that they also maintain high prudential standards. While this model is increasingly accepted globally, some countries have been comparatively slow in implementing it. One reason for the slow rate of adoption is that a large share of the banks (or of total banking sector assets) in many emerging markets either had long been, or are still, under state ownership. Many such banks have histories of substandard lending, which may have left them with a volume of loans that should be categorised as non-performing but may well be presented as performing. Significant shares of total credit are often allocated on the basis of government guarantees or under special programmes to support targeted sectors that may not favour SMEs. Banks may also be subjected to interest rate ceilings that make it difficult to price credit to SMEs as to be commensurate with the risks and costs of SME lending. Faced with doubts about the prospects for lending profitably to SMEs, banks may simply refrain from lending to the sector altogether.

In many countries, the prudential soundness of banks has been subordinated to industrial and development policy, with the supervisory function relegated to a marginal position. Consequently, the skills and prestige of banking supervisors have not been high. In such circumstances, banking supervisors have been reluctant to enforce strict prudential standards on banks, as this action would tend to expose the frailty of the financial system. Government-owned banks, in particular, are typically protected from failure and thus tend to have weak internal credit analysis skills.

The governance situation of privately owned banks may not be much better. In many emerging and developing countries, private banks frequently operate as part of industrial-financial groups, often controlled by family interests, which tend to lend on the basis of affiliated relationships, rather than on the basis of balance sheet quality, collateral, or earnings prospects. Many of these characteristics may be aggravated by policies that limit foreign penetration of the domestic banking market and, thus, diminish competition. Competition in the banking sector, especially in terms of market concentration, has been the focus of much research, in particular as regards to the supply of credit to SMEs. Theory does not provide a clear cut outcome. Increased market concentration might, for example, lead to a decrease in SME lending if institutions took advantage of increased market power to refrain from seeking out clients such as SMEs, which though potentially profitable, are more difficult to administer. Conversely, institutions might opt instead to pursue relationships with SMEs, expecting to be able to profit from the relationship over a longer period, given SMEs' lack of many alternative sources of financing (*e.g.* Sharpe, 1990; Petersen and Rajan, 1995). The empirical evidence is equally mixed as to whether or not increased concentration gives rise to higher or lower net amounts of SME credit.

Banking systems with these traits are likely to prefer activities such as lending to official institutions or to private firms with which the banks are affiliated. In either case, SMEs would likely face a persistent challenge in obtaining credit.

An illustration of a financial environment that is not conducive to SME lending is given in Box 2.1, which encapsulates the experience of Turkey. Turkey was chosen as a case in point because the country has experienced the full range of problems that can give rise to a serious SME financial gap, and also, as it has been analysed in a series of OECD Economic Surveys, information is readily available. The source of the financing gap of SMEs in Turkey can be found in the confluence of *i)* macroeconomic imbalances, *ii)* problems in the legal and regulatory system, and *iii)* distortions in the financial system that give SMEs few incentives to operate transparently and banks few incentives to lend to SMEs. The reforms that have been in place since 2001 span the full range of policy measures.

Box 2.1. SME finance in Turkey

Turkey can be cited as an illustration of many of the issues raised in the first part of this chapter. There is little bank lending to SMEs. However, analysis of the causes of the dearth of SME lending suggests that simply improving policies toward SME lending would not lead to better access to credit for SMEs. The low involvement of banks with SME lending can be traced to a more complex set of problems on several levels.

Macroeconomic imbalances have been severe with sharp swings in real income and a surge in inflation in the 1990s, as well as periodic balance of payments crises. One of the sources of ongoing macroeconomic instability was persistent fiscal imbalances, which had the effect of crowding out all private borrowers from the credit markets, with SMEs almost completely excluded. The most recent crisis, which erupted in 2001, has been followed by a series of reforms which should improve prospects for expanded SME lending in the future.

SMEs operate on the margins of the formal economy

SMEs account for a large share of activity, but they mostly operate on the margins of the formal economy. Unregistered businesses are estimated to employ more workers than registered businesses. This reflects a number of distortions in the legal, regulatory and tax framework in which all enterprises operate. Registered businesses tend to be larger than unregistered businesses and operate in more technologically advanced sectors. The registered business sector employs most of the physical and human capital in the country. They also have the best connection to banks and other financial intermediaries. Formal Turkish firms that operate inside the recognised framework pay the most taxes and also adhere to strict labour standards. Indeed, they are subject to employment protection measures, which many analysts consider excessively constraining. Unregistered firms are able to escape regulations and pay little in taxes. Micro-enterprises in Turkey account for about one-third of total manufacturing employment, but less than 8% of output. In other words, very small enterprises have low investment per worker and low productivity (OECD, 2004d). At the same time, established firms are subject to competition from the informal sector, in terms of labour costs and regulations, and they must contend with an unpredictable corporate tax environment.

The financial system has reflected these imbalances. Although the system can be characterised as “bank-dominated,” bank assets represent a comparatively low share of national income (reflecting a poor range of savings products, the assets of institutional investors represented the smallest share of GDP of any OECD country.) At the same time, bank costs are high, as are interest margins. Product innovation and credit skills have been weak, especially on the SME lending side. Foreign presence in the banking system is low (about 5% of bank assets) and competition is limited. In this environment, lending to SMEs is exceedingly small. Many commercial banks shunned SMEs because of opaque accounts, high transaction costs and doubts about the ability to gain control over collateral. With excess demand for credit, banks prefer to lend either to finance government deficits, public entities or affiliated groups. Meanwhile, lending to the private sector is typically very short-term.

The 2001 banking crisis

In the run-up to the 2001 banking crisis, the combination of an unstable macroeconomic environment, flaws in the business environment, and distorted governance and regulatory incentives in the financial system led to a virtual halt in “arm’s-length” lending. Banks shifted away from commercial lending toward arbitrage plays in foreign currency, a trend encouraged by the tax system. Lending within affiliated groups and concealment of the actual state of balance sheets facilitated irresponsible lending. Poor accounting principles and regulatory forbearance accelerated the trend. Inadequate loan classification and provisioning standards facilitated banks’ effort to conceal the true state of their portfolios. Full deposit insurance, first introduced after a banking crisis in 1994, was not removed on schedule, which further exacerbated moral hazard. Finally, public banks were major players in the market with few pressures to observe high prudential norms and, at the same time, serious pressures to accommodate the lax environment.

In 2001, the banking system entered a crisis in which many of the nation’s commercial banks became insolvent. This crisis is now on the path to resolution through a series of measures intended to achieve macroeconomic stabilisation and introduce basic structural reforms. A cap was imposed on lending to the public sector. Furthermore, many larger companies began to borrow in the capital markets (especially overseas) thus inducing banks to emphasise the “middle market” in their growth strategy. As of now, the shift away from lending to large industrial companies has been reflected mainly in expanded lending to the household and consumer sectors. However, in the longer run, the prospects for higher volumes of SME lending have brightened considerably.

Other reform policies were introduced to place the banking system on a sounder prudential footing. Laws and regulations covering banking supervision were brought into line with international practice:

1. Stricter loan classification and provisioning requirements;
2. Closure of many non-viable banks and/or mergers with stronger banks;
3. “Fit and proper” tests for bank ownership were introduced;
4. Regulations governing connected lending were tightened;
5. Banks’ authorised ownership of equity in non-financial companies were subjected to more stringent requirements;
6. A system of limited deposit insurance was introduced;
7. Risk management systems were introduced for new product lines, such as consumer and credit card exposure;
8. Transition to Basel II regulations was accelerated.

One of the objectives of the reform is to encourage banks to focus on hitherto neglected sectors, including SMEs.

In its 2004 Survey of Turkey, the OECD noted the importance of removing disincentives for firms to operate outside the formal economy that requires a set of reforms that include the macroeconomic policy process and span many aspects of the financial infrastructure. The OECD report calls for both enforcement and stronger positive incentives to shift activities into the formal sector (*OECD Economic Surveys: Turkey*, 2004, see Chapter 4, pp. 145-202).

Entrepreneurial business environment

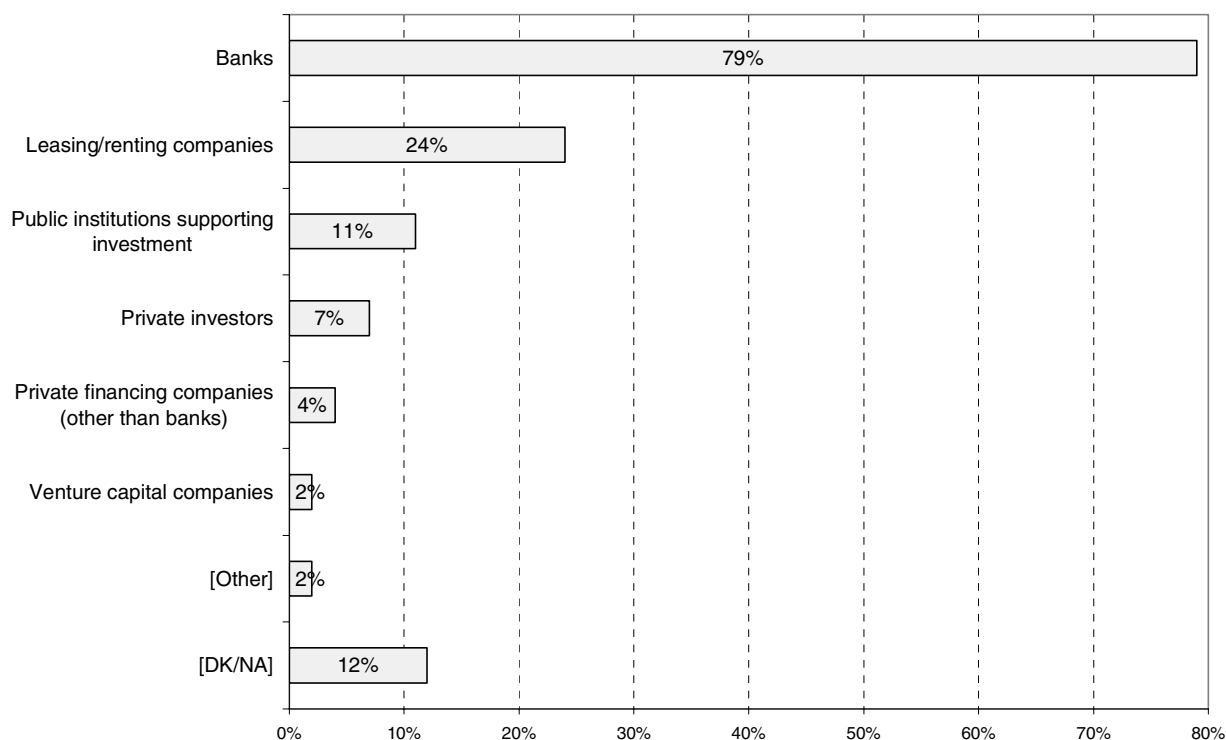
In general, the overall institutional framework should make it possible for banks and other intermediaries to deal with potential borrowers on the basis of the borrowers’ financial prospects, to build productive relationships as companies grow, and to obtain recourse against delinquent borrowers. All things equal, one would expect SME access to finance to be greater in environments in which banks are free to select their customers and have the freedom to price credit to reflect risk-reward tradeoffs and costs. The experience of a number of advanced economies shows that with a proper set of incentives banks are willing to seek out creditworthy SMEs and work with them. As banks have tended to become larger through mergers and acquisitions and to build financial conglomerates through affiliation with other providers of financial services, SME finance has tended to become absorbed into multipurpose financial institutions centred on commercial banks. Thus, SME finance is increasingly a task that falls on banks rather than on specialised credit institutions (Figure 2.1).

At the same time, many traditional banking activities such as lending to larger corporate entities or housing finance have been displaced into the capital markets. As a result, banks have sought to develop areas of business that enable them to profit from mentoring and maintaining long-term relationships with clients. This trend has encouraged banks to identify “middle market lending” (*i.e.* SME finance and consumer lending) as an area in which they can earn reasonable returns from on-balance sheet lending. By developing this market segment, banks can use their skills in credit assessment and other forms of risk management to diversify away from other less profitable lines of business.

Of course, in order for banks and other financial intermediaries to ascertain the real financial condition of prospective SME borrowers, there must be incentives for SMEs to produce transparent accounts or some other means of disclosure. The entrepreneur or principal owner of a SME has privileged information regarding the operation of the business, but may have incentives, on competitive grounds or various other reasons, to

remain somewhat opaque, not only in dealings with lenders but also with other outsiders such as regulators and tax authorities.

Figure 2.1. Sources of financing for EU-based SMEs



Source : EOS Gallup Europe, (2005).

There may be both positive and negative forces encouraging SMEs to operate in the informal economy. In some jurisdictions, the formal banking system shows little interest in lending to SMEs and, hence, the firms have little incentive to produce credible accounts and operate transparently. If entrepreneurs perceive a lack of willingness on the part of financial institutions to lend to SMEs, one of the key incentives for firms to move into the formal economy will be absent.

Even where banks are willing to deal with SMEs, the small firm may have incentives to remain outside the formal economy if more transparent operations and disclosure practices would expose the firm to more official scrutiny, tighter regulation, or higher taxation. High rates of taxation and complex tax regimes, as well as regulations that significantly raise the costs of doing business, constitute strong disincentives for SMEs to use the formal financial system to obtain financing.

These arguments suggest that responsibility for the lack of participation of SMEs in the formal economy cannot always be directed at banks and other intermediaries, although sometimes that is an appropriate conclusion. Rather, entrepreneurs sometimes conclude that their interests are better served by remaining in the informal system owing to excessive taxation or bureaucratic rigidity. The avoidance of formal channels of finance may also reflect the lack of institutional capability on the part of the authorities to enforce laws and require compliance with regulations. When the informal economy

reaches a substantial size it may simply become accepted practice to avoid taxes and regulations. Then, too, small firms may choose to operate in the informal economy owing to problems at the firm level.

Microeconomic environment

The development of an efficient SME lending environment requires that the economic agents involved (lenders and borrowers) have the incentives to make the correct economic choices. In addition, they must have the relevant information needed to make such decisions. Available evidence suggests that in the case of retail financial services such as lending to small businesses, these requirements are not always met. For example, in the presence of information asymmetries prospective lenders may not be able to correctly appraise the true value of a firm or its projects. Market imperfections of this sort impede efficient contracting between end suppliers of credit and users. Indeed, there are important considerations on both the demand and the supply sides of the market.

On the demand side, an important characteristic of consumers is their information set. In the ‘perfect competition’ paradigm of economic theory, consumers are assumed to be perfectly knowledgeable about the intrinsic characteristics of products offered in the market and the prices charged. Moreover, the information in question can be obtained without cost. With this knowledge on hand, a prospective consumer is able to identify and select the best available offer while incurring minimal cost. The assumption of product homogeneity is an added benefit for consumers as it means they are free to focus on price.

If price differentials can be observed at no cost for products that are perceived (at least) to be the same, then the ‘law of one price’ is more or less guaranteed. In such an environment, more efficient producers are able to set lower prices and because consumers are aware of the price differential between the offerings of the more efficient producers and the other suppliers. Rival producers are obliged to follow suit or are forced to sacrifice market share. The market mechanism works by forcing less efficient producers to either accept lower levels of profitability, improve their cost efficiency, or exit.

Even if the assumption of perfect information endowment is relaxed, the competitive process can still work as just described depending on two other types of consumer behaviour: 1) the nature of their search behaviour, and 2) their response to any price or quality differences their search uncovers, *i.e.* their willingness to switch from one provider to another. These two behaviours work in concert to bring about the desired outcome.

Theoretical models generally confirm the importance of search and switching behaviour in helping to bring about competitive market outcomes and its importance as a component of market discipline. For instance, the willingness of depositors and other creditors of a bank to take their funds elsewhere if they are dissatisfied with the quality of its products and services or are concerned about its risk profile serves as a check, in principle at least, on the discretion of the bank’s managers. The reality, of course, differs considerably from the theoretically prescribed behaviour.

Various empirical observations about the behaviour of consumers of retail financial products (including SMEs) have come from academic studies, laboratory experiments, and official surveys. Results vary but generally suggest that retail consumers do not always select products that represent the best financial value or that are most suited to their particular needs, owing perhaps to product complexity, lack of transparency in pricing, or some other causes.

Modern disclosure rules make a considerable amount of information available, but it is not quite clear that the “right” sort of information is always made available or that retail clients know what to do with the information that is disclosed. In either case, consumers of retail financial products and services will typically lack the sort of complete information assumed to exist under the textbook model of perfect competition. Therefore, it is perhaps not altogether surprising that consumers in this market segment also fail to exhibit the degree of price sensitivity and switching behaviour assumed in the textbook sense.

If customers find it costly to switch from one service provider to another, then the existing service provider gains a measure of market power over customers with whom it has an established relationship and enjoys some protection against rival providers. For example, in lending to SMEs, banks acquire private information that tends to lock these customers into a form of captive relationship, though not necessarily a one-sided one.

When borrowers seek loans from the same lender over time, a repayment history accumulates and the lender forms an extensive information set based on multiple discussions with management, assessments of financial statements or other supporting documents, and on re-negotiations of loan terms that can be used to refine contract terms offered under future lending agreements. In this context, Berger and Udell (1995) find that interest rates and collateral requirements on lines of credit decline with the length of a bank-borrower relationship, while Petersen and Rajan (1994) provide evidence that dependence on trade credit decreases with the length of a relationship. Hence, from the perspective of SME borrowers, an existing relationship has value, the capitalised value of which may be lost if they switch to a new service provider that does not have the same view of them or their business.

The cool reception they receive from the new lender is understandable. At the outset of a lending arrangement, the lender must evaluate the risks of making a loan and will seek to maximise the probability that the funds will be used for the stated purpose and, above all, the likelihood that the loan will be repaid. The decision depends on the nature of the firm, the experience and competence of its owner/manager, its track record, and so forth. Firms with a proven track record fare better, whereas for *de novo* borrowers asymmetric information can be a serious problem.

Because of this information problem, an otherwise high-quality borrower attempting to switch from a lender with which it has an established relationship might initially encounter unfavourable terms – ones typically offered to lower quality borrowers. Asymmetric information is a more serious problem with respect to SMEs than for large firms, reflecting the lack of audited financial statements or other public sources of information. Crucial information (*e.g.* on the creditworthiness of the borrower) is asymmetrically distributed and may typically be gathered only through direct contact over time between the owner/entrepreneur and a loan officer (although perhaps via many products provided simultaneously). Such information may be of a subjective nature and may not be easily observed or verified by others within the same lending institution, let alone by outsiders.

There are a number of other characteristics of SMEs as a group that make lending to them somewhat more problematic than is the case for larger firms and corporations. For example, it can be very difficult to distinguish the financial situation of the firm itself from that of its owner(s). The use of automobiles and home accommodations for both private and business purposes is one example of the commingling of assets that often occurs. As well, issues like estate tax and intergenerational succession can be very

important for SMEs, but tend to be relatively unimportant for larger companies. The importance of demographics should not be overlooked.

Data for the United States shows, for example, that while upwards from 80% of US businesses are family-owned, less than one in three typically succeed into the second generation. The success rate for ownership transition into the third generation drops even further to about 15%. Financing can often be a major hurdle. There can be numerous reasons for this, but often SMEs' difficulties arise because of incomplete or ineffective business ownership transition plans. SME ownership succession takes on added importance as the baby boom generation nears retirement, given the sheer volume of firms that will need to change hands. For example, according to the Canadian Federation of Independent Business as many as 70% of Canadian entrepreneurs will retire in the next ten years. Roughly half of those retiring are believed to lack succession plans.

Of course, even where business transition plans have been agreed upon, there might still be difficulties in the financing environment, depending on the bank-borrower relationship and the bank's credit review process. Trust may have developed over time between the banker and the existing owner-entrepreneur, but such trust usually will not pass automatically to the successor(s) and must be earned anew, especially if, in the eyes of the banker, the success of the business has been linked to the experience and acumen of the owner/entrepreneur. In Europe, for example, the majority of SMEs maintain a business relationship with just one bank (*e.g.* 90% in Denmark and 80% in Norway). However, the situation of an exclusive relationship with one bank may be contrasted with cases in which SMEs choose instead to source different products from multiple lenders, as is common in Italy and several southern European countries (Table 2.2).

Table 2.2. Number of banking relationships for European SMEs by size of firm (%)

	Fewer than 10 employees	10 – 49 employees	50 – 249 employees
Only one bank	52	39	33
2 -3 banks	38	42	31
4 or more banks	6	11	22
Do not know / NA	4	7	14

Note. Details may not add to totals due to rounding.

It is difficult to say whether single or multiple banking relationships entail greater difficulty in securing financing after ownership transition. Whichever approach has been adopted by the small business owner, it is important to note the importance of the banker to the lending agreement, *i.e.* the loan officer who actually approves or denies the loan application. Various factors pertinent to the bank can affect the lending process. Some factors may be easily quantifiable, such as internal limits on the total amount of such loans the loan officer is allowed to disburse, or more subjective, such as the banker's perceptions about the borrower's integrity or personality. Whereas larger firms would be expected to observe recognised standards of corporate governance in which actors such as executives, auditors, and boards of directors conform to transparent norms, SMEs tend to depend much more heavily on the personalities of their owners. On the plus side, the loan officer may have targets for small business loans. Many small and medium-sized banks specialise in small business lending, while some larger banks have divisions focussed on the SME loan segment. For example, a recent survey of bank SME lending in ASEAN found that 71% of respondent banks in ASEAN-6 have a unit specialising in or focussing

on SME financing. On the negative side, the loan officer may be assessed penalties for the volume of SME loans in arrears and may be reluctant to extend new credits. The various incentives and disincentives for loan officers can affect a loan officer's tenure in the position and can have a pronounced effect on the volume of SME loans approved.

Considerations of this sort serve to illustrate that not all difficulties SMEs may face in securing financing rest with the entrepreneur. To be sure, the loan applicant must successfully meet the "five Cs of credit": character, capacity, capital, collateral, and conditions (both macroeconomic and industry-specific) to ensure the banker that the adequate funds will be available to service the loan and to repay it at maturity or on an earlier call date. Among the major reasons of why loan applications are turned down is the lack of sufficient high-quality collateral (to secure the loan) or capital (own funds invested to ensure the borrower bears some risk). Providing loans when these conditions are not met can be risky for banks.

Of course, one of the reasons banks and other intermediaries exist is to assume and manage various types of financial risks. The commercial banking business relies heavily on low-cost deposits as a major source of funds. These funds, in turn, are re-invested in the mediation of various types of credit, market, and duration risks, backed only partly by reserves. However, as lending activities are at the core of the commercial banking business, credit risk is the dominant concern.

In an ideal world, depositors would have access at low cost, and without distortion, to full information regarding the risks that their bank was incurring and would be able to demand an appropriate risk-adjusted return on their deposits. Thus, deposit rates would accurately reflect banks' risks and would provide proper incentives for banks to be prudent in their underwriting. In practice, however, retail depositors have limited information regarding their banks' riskiness or limited ability to use the available information to compel a change in course.⁶ Consequently, deposit rates do not fully reflect a bank's insolvency risk; prudential regulators intervene to address the information and agency problem and the attendant mis-pricing of risk by subjecting banks to risk-based capital adequacy requirements.

Various regulatory measures may be imposed. For one, regulators require depository institutions to maintain a buffer layer of capital that is subordinate to the claims of retail depositors and other providers of low-cost funds. In addition, market forces compel banks to maintain capital cushions above the regulatory minimum. Hence, a bank with market rate funding would have to charge the borrower a sizeable mark-up attributable to capital requirements (*i.e.* price effect) in order to provide an adequate return on equity to its shareholders. In addition, banks tack on higher interest charges and other fees for borrowers they deem risky and use non-price terms to reduce the risk of default and mitigate other agency costs.

Regulatory requirements can also affect the volume of credit extended. Claims to this effect have often been raised when countries have implemented measures to bring their bank supervisory practices closer to international best practice as embodied in the Basel Committee on Bank Supervision's "Core Principles for Effective Bank Supervision". On the one hand, such changes in standards would be desirable to reduce the vulnerability of banks and improve the quality of their assets, but on the other hand, they might have the effect of constraining banks' ability to supply credit.

Structural measures to improve the robustness of financial systems often include tightening regulatory and supervisory frameworks by shortening the period for classifying

loans as non-performing, increasing general and specific loan-loss provisions, adopting international accounting standards, improving financial disclosure, and tightening capital adequacy rules. Such shifts in regulatory policy would tend to place downward pressure on lending and encourage the substitution by banks into safer assets. If bank lending is curtailed sufficiently, then some bank-dependent borrowers such as many small businesses may find it not only more difficult or costly, but simply impossible to obtain credit.

Various concerns have been raised in this regard about the potential effects of the new Basel II Capital Accord on the costs of credit for loans to small businesses. Under the existing 1988 Accord, banks' exposures to SMEs entailed a fixed capital charge of 8%. The new Accord seeks to align capital requirements more closely with a bank's actual risks on the basis of its three pillar approach. The first pillar changes the calculation of capital requirements against credit risk and introduces requirements against operational risk. Banks in some cases will be able to rely on external credit ratings when determining their capital requirements (standardised approach) or may instead be able to rely on their own internal measures of a borrower's credit risk (internal ratings-based approach), provided they meet certain preconditions. The alignment of risks and capital under the first pillar is supported by supervisory review (Pillar 2) and market discipline (Pillar 3) through requirements for enhanced transparency.

The basic objective of the Accord is to require banks to hold sufficient capital to guard against unexpected credit losses. For purposes of classification, assets are grouped according to their underlying risk characteristics, with distinctions drawn primarily among bank, corporate, equity, retail, and sovereign exposures; although various sub-categories exist depending upon the measurement approach a bank chooses.

In the business loan category, the SME sector is characterised by wider variance of profitability and growth than for larger enterprises. SMEs, for instance, exhibit greater year-to-year volatility in earnings and the survival rate for SMEs is considerably lower than that for larger firms. Complete current data is not available but one study finds, for example, using data from the mid-1990s that manufacturing firms with fewer than 20 employees are five times more likely to fail in a given year than larger firms (Storey, 1995). All things equal, one would expect the higher default probabilities of individual SME loans to translate into a higher capital charge for this loan segment and, indeed, this was clearly the case in the new Accord as it was initially proposed. Among the fears the initial proposal engendered is that capital requirements and, hence costs for loans to SMEs, would rise prohibitively given the treatment of the higher default probabilities for SME loans.

In light of the criticisms raised and the subsequent study, the Basel Committee made a series of adjustments to the proposed Accord, which made greater distinctions between banks' exposures to SMEs versus exposures to large corporations. In particular, the Basel Committee took note of evidence showing that while individual SME loans have higher default probabilities than loans to large corporations, a portfolio of such loans may benefit from a greater degree of diversification than a handful of loans to large corporations, which would lessen the amount of capital protection needed. The Basel Committee noted as well that bank loans to SMEs are often backed by various types of specific collateral or guarantees, which help reduce a bank's actual exposure to credit risk.

Based on this evidence, the proposed capital charges for loans to smaller firms have been reduced, recognition has been given to a wider variety of collateral as provided by

SMEs, and banks who qualify may be able to treat their smallest business credits as retail exposures up to a maximum loan amount of EUR 1 million. These modifications should help lessen any burden on banks that lend to SMEs and avoid a corresponding negative impact on the volume of SME lending.

That said, the total effect on capital requirements for any given bank remains an empirical question and will depend, among other things, on its particular mix of obligors (*i.e.* on the relative percentage of SMEs that can be included in the retail category as well as the distribution by size of exposure to remaining SMEs). In any event, the data requirements for banks to justify their particular treatment of SME credits may well place increased disclosure requirements on their SME clients, and it cannot be ruled out that banks may pass along some of the additional compliance costs under Basel II to their clients. This possibility has been explicitly noted, for example, in the final report of the ASEAN Project, “SME Access to Finance: Addressing the Supply Side of SME Financing”.

On the basis of the discussion thus far, certain interim conclusions may be drawn:

The growth and development of financial systems owes in part to successful product innovations and process innovations (*e.g.* new risk management techniques) that provide for a more efficient allocation of resources and, thereby, a higher level of capital productivity and growth. Legal and regulatory arrangements can either assist or impede this progress.⁷

Borrowers gravitate towards or are directed to intermediated sources of credit when private information and agency costs are relatively severe. That is to say, in most jurisdictions commercial banks as a group are the main source of external finance for SMEs.

Various factors influence the stringency of terms and the volume of credit extended by banks to SMEs. Some factors may be attributed to the borrower, some are related to the bank, and some have their origin in government policy. All three components are important in assessing the environment for SME lending. For example, low levels of SME lending may reflect: 1) low levels of entrepreneurship or a lack of investment-ready projects, owing perhaps to a lack of capacity on the part of business owners or on a lack of transparency regarding banks’ rating and risk assessment procedures; 2) a lack of familiarity with or unwillingness on the part of banks to extend credit to the SME sector; or 3) taxation policies that discourage entrepreneurship or other inappropriate government policies that discourage the participation of SMEs in the formal financial sector.

Managing the special risks of SME lending

Over time, two main channels have developed to facilitate the flow of funds from sources of funds to end-users: intermediaries and markets. Commercial banks and other intermediaries match suppliers and users of funds indirectly by transferring terms, maturities, etc., through the issuance of claims on themselves. The other channel consists of securities markets, which match suppliers and users of funds more or less directly. The two channels differ in various ways, including in the manner in which information and agency problems are addressed.⁸ Borrowers, whose credit risk is relatively easy to assess and for which indirect monitoring mechanisms are adequate (*i.e.* a function of a regular flow of credible financial information via audited financial statements, published assessments of credit rating agencies, or market prices for the firm’s outstanding publicly

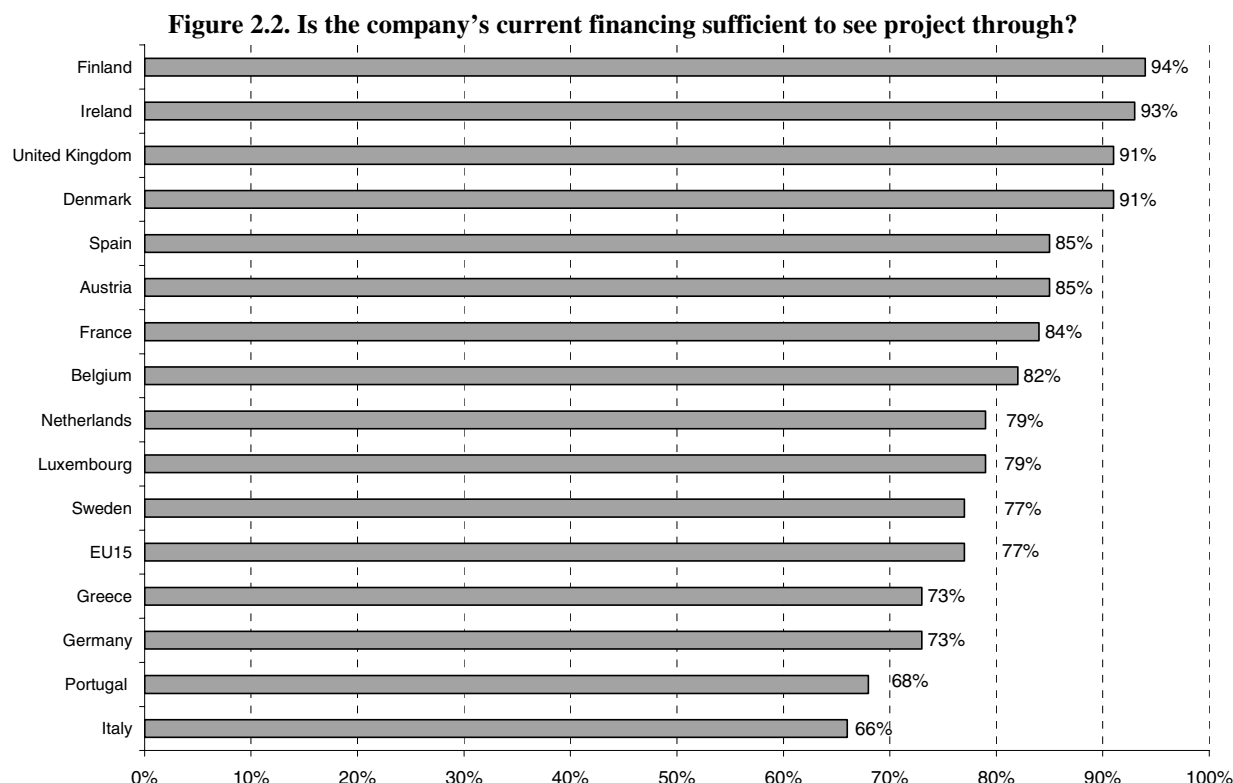
rated securities) often opt for capital market financing, while borrowers for which such public information about their credit history is lacking have been forced to rely on banks, other intermediaries, or non-formal sources of credit.

Banks and other primary lenders specialise in lending to such borrowers and in financing activities that are difficult to assess. However, there are limits to the amount and types of risk banking organisations are willing to assume. For example, with some exceptions, banks in most jurisdictions do not take on pure equity exposures to non-financial entities (at least not using bank capital, but perhaps in a subsidiary) and some activities may be too risky for the banking sector to intermediate. To survive in competitive markets, loan originators must be able to distinguish better credit risks from poorer ones and to set their loans terms accordingly. Banks, for example, when properly managed and supervised are usually good at assessing credit quality when deciding whether or not to approve a loan application, but in addition to higher interest charges and other fees for risky borrowers, banks also use non-price terms such as restrictive covenants to reduce the risk of default and mitigate other agency costs. These precautionary arrangements protect the lender's interests and also help to insulate its own creditors from credit risk.⁹

Financial stability in particular and more generally economic growth depend on the maintenance of a healthy balance between risk and return on the part of the banking sector, given its importance as the key credit intermediary in most economies. If underwriting is too tight, a generalised capital shortage may develop in the economy, especially if alternative sources of credit are limited. Conversely, underwriting standards that are too lax may encourage borrowers to take on too much debt, which they may have difficulty servicing or repaying down the road when credit terms inevitably are tightened. In some cases, borrowers could be forced into bankruptcy. Rising numbers of bankruptcies could translate into higher rates of loan defaults. In light of the declining credit quality, banks might take the pre-emptive step of tightening underwriting criteria further and increasing risk premiums on loans, touching off another round of problems. If this happens a vicious cycle may develop, the economic costs of which can be substantial. Few economic agents benefit from such a scenario. Clearly, a better alternative is to prevent such a cycle from forming in the first place. That means typically that “no” must sometimes be the correct response to requests for credit. Then the question becomes whose request is refused and what, if anything, should be done about it.

As noted above, the cyclical nature of the lending business may have a more pronounced effect on certain categories of borrowers. Arguments in this regard often focus on SMEs and some participants argue that various subsets of SME borrowers face a persistent shortfall in credit. From the earlier discussion, it has been noted that there are inherent difficulties in lending to SMEs that may impact negatively on credit extension. Small business borrowers are a heterogeneous group and the terms and conditions under which they seek credit limit the applicability of less expensive, indirect monitoring mechanisms. Rather, loans to small businesses are often designed to meet the specific needs of individual businesses and to take into account the ability of those firms to meet specially tailored repayment schedules. The loans, thus, tend to be quite varied in nature having been extended to borrowers of different credit qualities, and with considerable variation in interest rates, amortisation schedules, collateral support, and documentation.¹⁰ Moreover, a restructuring of loan terms is often required, as the economic conditions in which SME borrowers find themselves can change quite markedly. The need for close monitoring and re-negotiability of terms can result in a tremendous administrative overhead for the relationship manager.

The administrative and other costs of SME lending notwithstanding, looking at the development of SME finance over time in most developed economies, it seems clear that market participants have found ways to meet at least part of the credit demands of the SME sector (Figure 2.2). A broad range of instruments, markets, and institutions have stepped in to fill a supposed financing gap by finding the means to address the particular challenges of asymmetric information, agency problems and monitoring presented by SMEs.



Source: EOS Gallup Europe, 2005.

Situations in which large banks and other traditional lenders have not been active participants, smaller institutions operating at the local level have done the bulk of the credit analysis. Institutions, such as local banks, as well as credit co-operatives, and savings and loan associations, have developed financing vehicles that expanded both the possibilities for credit extension and the range of investment options for small savers, often using information obtained from lawyers (or notaries), accountants, and credit reporting agencies. These non-financial entities usually were well placed to acquire and disseminate credit information. Personal guarantees and recommendations were widely used and trade credit was a common form of financing.

However, times have changed. While some institutions have remained averse to the risks of lending to informationally opaque SMEs, as reflected in their use of complex administrative procedures, demanding collateral or guarantee requirements, or a reluctance to renew loans at maturity or early withdrawals of existing facilities, others have shown increasing willingness to extend credit to SMEs.

A large academic literature has examined SME lending, often based on a comparison of arm's length lending arrangements in which institutions and individuals provide funds to firms via the purchase of publicly offered securities or where lending is based on other transactions-based considerations with intermediated lending relationships (in particular, arrangements involving implicit long-term relationships between banks and firms). In competitive environments, financial institutions make a number of choices with regard to their organisational structure, product mix, and strategies, according to their perceptions of their own competitive advantages, compared to those of other service providers. These choices tend to vary across jurisdictions and across market segments. With respect to services provided by banking organisations to SMEs, research has explored whether increased size, ownership structure, or organisational complexity of service providers negatively affect the provision of retail-oriented services like those directed to SMEs. Various dimensions have been explored, including comparisons between large versus small institutions, state-owned versus privately owned, and foreign-owned versus domestic. There is a size dimension in the latter two comparisons to the extent that state-owned and foreign-owned service providers tend either to be large providers themselves or are parts of large, complex parent organisations.

There could be a number of reasons why certain categories of service providers may be relatively less efficient at lending to the SME sector or may simply have comparative advantages in producing and distributing transactions-based products and services to larger, less informationally opaque customers. The usual argument is that labour-intensive arrangements like SME lending favour smaller, less complex institutions. Borrowers in the retail segment perceive significant barriers to switching accounts, including perceptions that loyalty carries benefits while breaking in a new lender entails tremendous hassle. In such a lending environment, small and local banks that operate at low scale, through physical branch locations and sell hands-on products for which customers are willing to pay high prices may indeed have a comparative advantage over large service providers. Larger, more complex financial institutions might be inefficient at providing these types of relationship-based products compared to (or in addition to) the transactions-based products and services offered to larger, less information problematic customers. The possibility exists, however, that large institutions might be large because they are more efficient at providing all types of products and services, which would suggest there would be no negative effect of size regarding the provision of retail products and services. Larger, universal institutions, in any event, would be expected to have an edge in the world of corporate banking, given its reliance on product expertise in several areas, operational excellence, financial risk management, and standardised systems, which tend to be based on proprietary information technology.

The empirical findings are generally consistent with the view that smaller financial institutions are relatively more inclined towards relationship lending, while larger institutions tend to favour transactions lending mechanisms (see, for example, Berger, Miller, Petersen, Rajan and Stein, 2005). Evidence has shown, for example, that large banks tend to lend to larger, longer-lived, and more financially secure SMEs (*e.g.* Haynes, Ou and Berney, 1999), which may imply a preference for lending to more transparent, less risky borrowers. Similarly, large banks tend to charge lower interest rates than smaller banks, which, other things equal, would suggest a lower risk borrower clientele. Research has also found that relationships between large banks and SME customers tend to be of shorter terms than those involving small banks (*e.g.* Berger, Miller, Petersen, Rajan and Stein, 2005).

Empirical evidence regarding state-owned banks suggests above all else that these banks tend to be relatively inefficient, which may result in negative consequences for SME borrowers. Studies show, for example, that countries in which state-owned institutions account for a large share of total banking sector assets tend to be characterised by lower amounts of SME credit (*e.g.* Beck, Demirgüç-Kunt and Maksimovic, 2004; Berger, Hasan and Klapper, 2004).

As noted in the recent critique by Berger and Udell (2004), a shortcoming of many earlier studies is that they do not explicitly distinguish among different types of lending mechanisms that make use of so-called “hard” data, which are themselves quite heterogeneous. In fact, banks and other lenders have developed a variety of transactions-based mechanisms to address the information and agency problems in extending debt financing to SMEs. The success of such mechanisms as asset-based lending and credit scoring would seem to suggest that relationship lending is not a necessary requirement for lending to SMEs and, consequently, concerns in this regard over the size of banks may be overstated.

Large businesses tend to be more price-sensitive than small business borrowers, have greater access to securities markets and, thus, are comparatively less reliant on bank financing. With the larger size typically comes greater name recognition, better reputation, etc. and tends to increase the funding options available to firms and, in turn, their incentives to diversify their funding sources. In comparison, smaller businesses tend to borrow time and again from the same lender or small group of lenders to ensure a reliable flow of credit. Typically, financing costs tend to be lower for borrowers who raise funds through the sale of securities compared with those whose credit is intermediated by banks or other intermediaries. For SMEs, the greater concern is not the cost of credit, but, rather, access to credit.

Fortunately, there are alternatives to rationing credit in order to address agency problems and information asymmetries associated with SME lending, although admittedly not all of the approaches are in widespread use (see Box 2.2 for microfinancing and related alternatives in the case of emerging markets). Banks and other primary lenders often attempt to overcome the risks inherent in debt finance by seeking collateral to cover losses in the event of insolvency. A borrower’s willingness to supply collateral of the required quality and amount can be construed as a signal of its creditworthiness or the validity of its prospects. Collateral ensures that the borrower bears some risk of loss and provides the lender with an alternative source of repayment should the firm’s business climate deteriorate. An increasingly popular form of SME lending, similar in many respects to the arrangements just described, is asset-based lending.

Just as in the case of a loan backed by a borrower’s collateral, the decision of the lender in asset-based lending is a function of the value of the collateral. In this case, however, the decision is not tied directly to the economic prospects of the firm. In fact, many SME collateralised lending arrangements are fully asset-based in the sense that the

Box 2.2. Microfinance: an unrealised potential? What policy recommendations?

Evidence on the role of microfinance institutions (MFI) and increasing attention from policy makers and international organisations

It is estimated that only a fraction of the 4 billion people – households and micro-entrepreneurs – living on less than USD 1500 a year, the so-called “bottom of the pyramid”, have access to basic financial services. Microfinance, *i.e.* loans and other financial products targeted at low-income clients, has proven very successful in expanding their access to credit.¹¹ Microfinance Institutions (MFIs) include a broad range of financial sector organisations such as banks, non-bank financial institutions, financial co-operatives and credit unions, finance companies and NGOs specialising in serving people who lack access to traditional financial services. The UN Commission on the Private Sector (2004) suggests that micro-credit schemes and MFIs serve 41 million poor people in over 65 countries. The challenge remains to meet the huge, untapped demand in credit for cottage industries and micro enterprises, which are often “unbankable”, insulated from formal, traditional financial markets and must resort to informal moneylenders. Against this background, the United Nations declared 2005 the Year of Microcredit, calling to “build inclusive financial sectors and strengthen the powerful, but often untapped, entrepreneurial spirit existing in impoverished communities.”

MFIs are potentially useful to fill a gap in short term financing and avoid resorting to informal money lenders and could also become a source of financing for micro enterprises and SMEs, as well as contributing to the development of financial intermediation, insurance instruments and markets (especially in rural areas and amongst the “unbankable”).

MFIs have proved efficient to a certain extent in filling the SME finance gap. Over the years, MFIs have developed from being purely a poverty-alleviation tool to financing economic development through their proximity to local entrepreneurs. Their successful uptake is due to a flexible formula offered to small entrepreneurs, bypassing stringent regulatory and collateral requirements. For example, Novobanco, active in Africa and Latin America, provides credit to SMEs based on no-fees account with no minimum balance, informal guarantees (house assets and a guarantor), and a continued relationship with loan officers.

Various capacity and regulatory constraints limit the realisation of such a potential

Despite their adequacy to local needs, however, MFIs remain small and fragile. They often lack the skills to assess project proposals and to develop or adopt innovative financial tools. MFIs struggle to follow their clients as they grow since they suffer from the lack of medium to long-term saving tools to transform into long-term lending. Furthermore, the refinancing of MFIs through the formal banking sector is limited by a lack of collateral and the cost of financing. Unlike commercial banks, MFIs have no access to central bank refinancing at low cost and do not qualify for refinancing through venture capital as they are not formal financial institutions.

Policy remedies can be devised to address such shortcomings

Promoting agreements between MFIs and providers of non-financial services can ease the MFIs capacity constraint. Business Development Services (BDS) institutions can carry out the first selection of the project proposals on purely technical substance aspects and then relay projects to MFIs in order to assess the financial viability. In turn, BDS may provide moral guarantees for its members seeking funds to the MFI, based on a technical assessment of the project proposals.

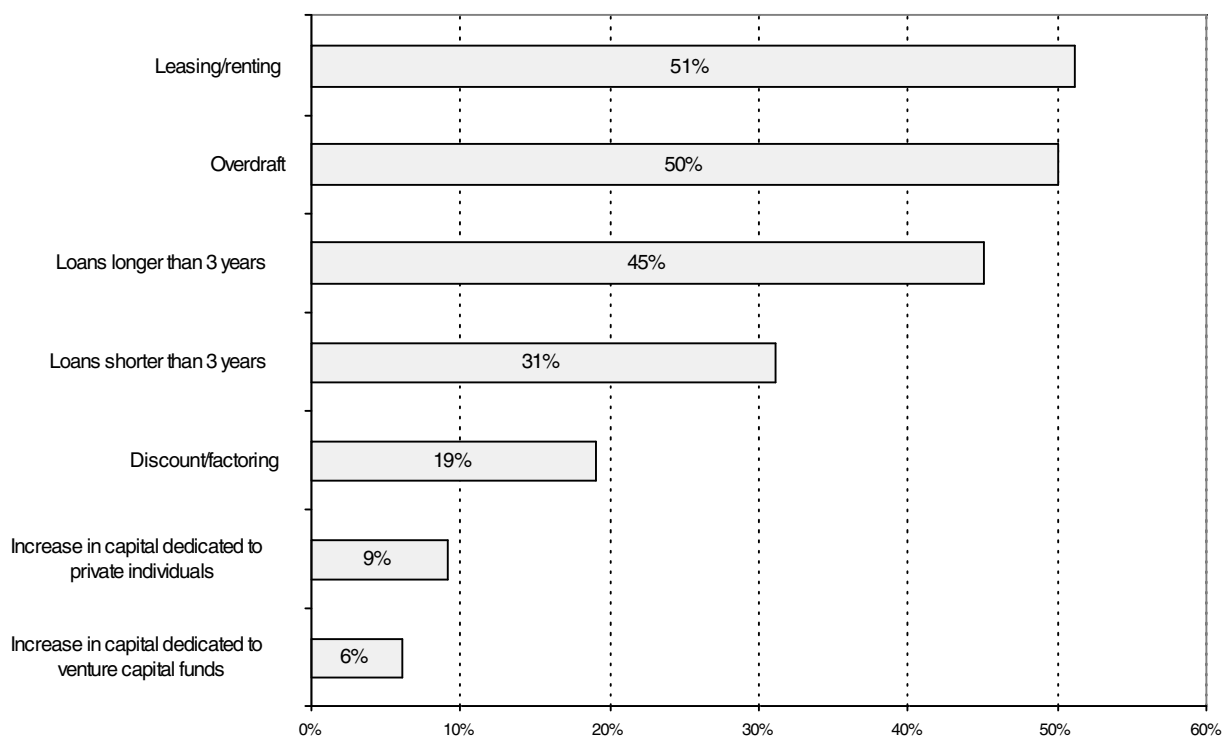
Financial sustainability of MFIs can be ensured by a closer collaboration with formal banks. The transfer of clients to the banks as their financing needs increase is a good example of co-sharing of finance for SMEs between MFIs and commercial banks. Associating informal financial organisations and formal institutions can help the former grow towards formality. A major drawback, however, is the loss of growth-oriented clients for the MFIs. Specific regulatory frameworks may help MFIs extend their lending activities to SMEs, mainly by increasing the maximum loan amount and by extending the maximum loan maturity. Following the regulatory changes, many MFIs are developing into fully-fledged rural banks and are able to finance medium-sized enterprises.

loan is based solely on the lender's ability to value the underlying assets with certainty and gain a perfected lien in them and not on the borrower, much as in the case of traditional structured finance. By assumption, this type of lending is deemed to be associated with higher risk borrowers, but empirical evidence on this point is limited. An exception is a study by Carey, Post and Sharpe (1998) which supports the hypothesis.

Leasing

Leasing is a common source of funding for SMEs (Figure 2.3). In a typical lease agreement, an owner (lessor) of machinery or equipment grants the user (the lessee) the right to use the equipment for an agreed period of time in exchange for a series of specified payments. There are two variants. In an operating lease, the term of the lease is less than the expected useful life of the equipment. At the expiration of the lease, the equipment is returned to the lessor typically with no further obligation on the part of the lessee.

Figure 2.3. Types of financing used by European SMEs



Source : EOS Gallup Europe, 2005.

Capital leases, by contrast, usually run for much of the useful life of the equipment and the lessee in most cases is expected to obtain ownership of the equipment at the end of the lease term. Leases are often provided by standalone finance companies, but may be offered as well by financing arms of non-financial corporations or by subsidiaries of banking organisations where this activity is not prohibited. Data from Statistics Canada show, for example, that in 2001, SMEs sought 59% of their lease financing from leasing companies, followed by manufacturers, dealers and suppliers (18%). Owing to

restrictions in the *Bank Act*, chartered banks provided less than 10% of the amount requested.

An advantage of leasing is that it converts what would otherwise be a large, lump-sum expenditure into a series of smaller expenditures, thereby freeing up funds for investment in inventory, working capital, or other shorter term assets. It is sometimes argued as well that leasing is a more practical funding alternative to loans from commercial banks, as leasing firms typically use less stringent underwriting criteria.

Asset-based SME lending

Much like traditional securitisation techniques, asset-based SME lending relies, to varying degrees, on the separation of the assets from the borrower. The asset pool is pre-specified, so final investors bear only the risks on a clearly delineated, existing pool of receivables that meet specific criteria. The lender is not exposed to other types of risks that would be associated with a direct credit exposure to the originator, such as the borrower's exposure to non-credit losses or losses on other assets. A basic problem of SME lending is the lack of adequate information on credit performance, the absence of which means that loss probability distributions for the many different types of borrowers or businesses cannot be reliably estimated. Asset-based lending addresses this problem by shifting the focus of the credit analysis from the borrower, as a whole, to an evaluation of specific tangible assets, most often accounts receivable from known entities, inventory, or equipment.

The amount of credit extended by the lender is derived numerically based on a moving forecast of the liquidation value of the pledged assets. For flow variables (*i.e.* inventory and receivables), the collateral value changes over time so lenders must monitor the value on an ongoing basis, often daily, and there are typically on-site inspections as well, although on a less frequent basis.

The need for such intensive monitoring of collateral requires appropriate technological capacity on the part of the lender and, like relationship lending, is not without cost. However, it can be done efficiently irrespective of a lender's size or organisational structure, provided the necessary legal infrastructure governing collateral liens is in place. Thus far, this type of lending has been popular only in a handful of common law countries that also tend to have sizeable, structured financial markets (*i.e.* Australia, Canada, the United Kingdom, and the United States).

Factoring

In comparison to asset-based lending, the use of factoring, which is similar in many respects, is much more widespread (Table 2.3). Like asset-based lending, factoring entails the use of accounts receivable as backing for a loan and is based on their valuation independent of the risk profile of the borrower.

Unlike asset-based lending, however, factoring is limited solely to accounts receivable. Importantly, as in traditional structured finance, factoring relies on the legal separation of the assets from the seller. Thus, should the borrower under the agreement become insolvent, the assets in question would not be considered part of the estate and would not be subject to bankruptcy proceedings. This aspect of a factoring makes the arrangement particularly important as a source of financing in jurisdictions with inefficient insolvency regimes.

Table 2.3. Growth in factoring by country

(Millions of EUR)

	1998	1999	2000	2001	2002	2003	2004
EUROPE							
Austria	1 832	2 007	2 275	2 181	2 275	2 932	3 692
Belgium	4 366	7 630	8 000	9 000	9 391	11 500	13 500
Bulgaria	0	2	1	2	0	0	0
Croatia	0	0	0	0	0	0	28
Cyprus	959	1 120	1 410	1 554	1 997	2 035	2 140
Czech Republic	468	780	1 005	1 230	1 681	1 880	2 620
Denmark	2 894	3 360	4 050	5 488	5 200	5 570	6 780
Estonia	213	470	615	1 400	2 143	2 262	3 920
Finland	5 230	5 630	7 130	7 445	9 067	8 810	9 167
France	44 255	53 100	52 450	67 660	67 398	73 200	81 600
Germany	20 323	19 984	23 483	29 373	30 156	35 082	45 000
Greece	596	850	1 500	2 050	2 694	3 680	4 430
Hungary	115	144	344	546	580	1 142	1 375
Iceland	21	100	125	26	16	25	16
Ireland	3 957	6 160	6 500	7 813	8 620	8 850	13 150
Italy	75 319	88 000	110 000	124 823	134 804	132 510	121 000
Latvia	0	0	0	Shown	with Estonia	until 2003	155
Lithuania	0	0	0	Shown	with Estonia	until 2003	1 040
Luxembourg	0	0	0	0	197	257	285
Netherlands	17 702	20 500	15 900	17 800	20 120	17 500	19 600
Norway	3 787	4 260	4 960	5 700	7 030	7 625	8 620
Poland	609	605	2 085	3 330	2 500	2 580	3 540
Portugal	5 545	7 450	8 995	10 189	11 343	12 181	14 700
Romania	20	37	60	98	141	225	420
Russia	0	0	0	0	168	485	1 130
Slovakia	179	160	160	240	240	384	665
Slovenia	14	35	65	71	75	170	185
Spain	9 936	12 530	19 500	23 600	31 567	37 486	45 376
Sweden	7 677	7 550	12 310	5 250	10 229	10 950	14 500
Switzerland	1 464	1 300	1 300	1 430	2 250	1 514	1 400
Turkey	4 043	5 250	6 390	3 947	4 263	5 330	7 950
United Kingdom	84 255	103 200	123 770	136 080	156 706	160 770	184 520
<i>Total Europe</i>	295 778	352 214	414 383	468 326	522 851	546 935	612 504
AMERICAS							
Argentina	1 026	1 481	1 715	1 017	71	70	101
Brazil	13 620	17 010	12 012	11 020	11 030	12 040	15 500
Canada	1 863	1 952	2 256	2 699	3 100	3 161	3 157
Chile	1 991	2 600	2 650	3 123	3 130	3 500	4 200
Colombia	85	50	0	0	0	0	0
Costa Rica	162	226	258	208	210	185	180
Cuba	0	185	108	113	120	93	190
El Salvador	0	0	0	123	157	102	105
Mexico	2 519	3 550	5 030	6 890	6 340	4 535	4 600
Panama	0	11	220	220	0	160	201
U.S.	70 059	88 069	102 268	101 744	91 143	80 696	81 860
<i>Total Americas</i>	91 326	115 134	126 517	127 157	115 301	104 542	110 094

Table 2.3. Growth in factoring by country [cont'd]
(Millions of EUR)

AFRICA							
Egypt	0	0	0	0	0	0	1
Morocco	187	57	45	50	190	160	300
South Africa	3 957	5 340	5 550	5 580	5 860	5 470	7 100
Tunisia	54	73	60	171	153	210	185
<i>Total Africa</i>	4 198	5 470	5 655	5 801	6 203	5 840	7 586
ASIA							
China	11	31	212	1 234	2 077	2 640	4 315
Hong Kong, China	1 294	1 800	2 400	2 690	3 029	3 250	4 800
Indonesia	28	33	3	0	1	1	0
India	174	257	470	690	1 290	1 615	1 625
Israel	108	219	460	429	354	190	155
Japan	38 980	55 347	58 473	61 566	50 380	60 550	72 535
Lebanon	0	0	0	10	22	35	41
Malaysia	687	805	585	842	610	718	730
Oman	14	21	30	36	29	10	8
Philippines	10	10	0	0	0	0	0
Saudi Arabia	0	0	0	150	100	50	0
Singapore	1 510	1 970	2 100	2 480	2 600	2 435	2 600
South Korea	17 149	15 120	115	85	55	38	32
Sri Lanka	38	62	99	115	110	102	128
Taiwan	1 004	2 090	3 650	4 511	7 919	16 000	23 000
Thailand	715	1 010	1 268	1 240	1 274	1 425	1 500
United Arab Emirates	0	0	0	0	0	37	145
<i>Total Asia</i>	61 723	78 775	69 865	76 078	69 850	89 096	111 614
AUSTRALASIA							
Australia	3 319	5 100	7 320	7 910	9 527	13 716	18 181
New Zealand	162	184	100	410	465	263	236
<i>Total Australasia</i>	3 481	5 284	7 420	8 320	9 992	13 979	18 417
TOTAL WORLD	456 506	556 877	623 840	685 682	724 197	760 392	860 215

Source: FCI, 2005.

Factoring is actually a package of financial services that combines a financing component and credit risk protection with accounts receivable management and collection. In fact, the factoring industry has grown noticeably in recent years, in part as a means of assisting SMEs in collecting outstanding amounts under accounts receivable. Under the terms of a factoring agreement, the “seller” signs a contract assigning a list of agreed receivables to the lender (*i.e.* the factor). In effect, the factor purchases the accounts receivable, typically without recourse; although factoring can also be done on a recourse basis in which the borrower retains a contingent liability with respect to agreed amounts of collections. The factor, which is often a subsidiary of a major bank although a few smaller institutions also participate, assesses the creditworthiness of the buyer and establishes lines of credit, terms of trade credit, etc. The factor then pays the SME an advance of the value of the invoice up-front, less a discount. The advance often totals about 80% of the invoice amount, with the balance (less the return to the factor) rendered when the invoice has been settled.

Trade credit

Trade credit is in some respects the other side of the coin from factoring. In fact, trade credit represents an SME's accounts payable – credit extended by the firm's non-financial suppliers to enable the SME to delay payment on its purchases of inventory or equipment. Lenders may use a combination of underwriting mechanisms when deciding to provide this form of credit. Hard data may be used for borrowers for which financial statements are available, but obviously, lenders may also make use of information obtained from longer term relationships with a customer.

Analysts argue that trade credit may be even more important in assuring an adequate flow of credit to SMEs in emerging markets or economies where legal and regulatory structures are problematic. However, data on the actual volumes of trade credit is far more limited, say, than data on factoring, which makes it difficult to draw firm conclusions. Where data are available, the evidence suggests that trade credit is an important component of SME finance, rivalling bank loans in some jurisdictions. In Canada, for example, trade credit from suppliers accounted for nearly 40% of the outstanding debt owed by Canadian SMEs in 2000, compared with commercial loans and lines of credit at 49%. It is not clear, however, to what extent SMEs are net borrowers or lenders under trade credit arrangements. In the United States, for example, about one quarter of total credits and accounts are payable to SMEs in the form of unpaid accounts.¹² While SMEs obviously gain in the delayed payment of their own bills, there are significant delays in the payment of invoices by their customers, which are often larger firms. These delays vary markedly between countries with, for example, the average credit period being less than 40 days in Sweden, compared with roughly 90 days in Italy. The differences owe in part to different payment terms (*e.g.* 66 days in Italy versus 26 days in Sweden), but also reflect different payment habits.

Credit scoring

Technology has been a key driver of change in SME lending. First, there is the technical aspect, namely that rapid advances in telecommunications, computer processing, and electronic data transmission have contributed to a marked expansion in distribution capacity, while at the same time driving down unit costs of computing. Second, there is the impact of technology on the flow of information. Technological advances have enabled financial service providers to harness information more productively, which means that differentiated or specially tailored products can be produced and channelled to targeted customers. A prime example is the use of direct mail or telemarketing campaigns to offer standardised loan products to customers that have a certain credit risk profile based on assessments from a credit-scoring model. Credit scoring techniques have been used for some time in the consumer credit and residential mortgage market, but have only been applied to small business lending in the mid-1980s.¹³ Business scoring applications now include a variety of different product lines, including closed-end loans, revolving lines of credit, business credit cards, equipment leasing, agricultural lending, and business-to-business credit.

For small business loans, cash flows are difficult to predict because the loans are relatively heterogeneous in nature, are extended to borrowers of different credit qualities, and have relatively wide variances of collateral, interest rates, amortisation schedules, loan terms, and documentation. Moreover, the repayment of a small business loan may depend on the use of the proceeds of the loan and the nature of the business. Hence, estimates of future losses may depend more directly on the specific purpose of the loan or

the economic and market characteristics of the business, factors that can be more difficult to evaluate. Credit scoring techniques help to overcome these difficulties.

Scoring models evaluate credit risk based on a statistical analysis of the historical relationship between loan defaults and specific characteristics of loans and borrowers. The premise underlying credit scoring is similar to subjective judgment, namely that a new customer who resembles those who performed well in the past will also perform well. A key difference is that credit scoring uses a numerical formula to predict the creditworthiness of the applicant, based on information from the applicant and the credit bureau report on the applicant. Based on this historical performance data, weights are assigned to variables that are found to be reliable predictors of default. The points for each scorable component are added, producing a score that ranks the applicant or customer along a standardised risk ladder.¹⁴

Most scoring models for small business loans are systems that place greater emphasis on specific financial characteristics of the borrower, such as previous late payments or defaults on personal loans, than on the current financial condition of the business for which the borrower is seeking the loan. Data used to develop the scorecard can come from various sources. For large banks with sufficient historical data on hand, customised scorecards can be developed based on the bank's previous good accounts, its bad accounts, and its pool of rejected applicants. Smaller institutions that lack the necessary data can use scorecards developed on the basis of data pooled from a number of lenders. Scorecard vendors also build scorecards based upon specific information and parameters provided by a lender. The reliability of the scoring model depends on the accuracy, completeness and timeliness of the information used to generate the model, and on the stability of the population.

An effective scoring model should successfully rank risk as designed. For example, a model may be considered valid for a given population of loans if it can separate “good” and “bad” accounts within a 95% confidence interval. In some banks, the score itself functions more or less as the definitive approve/decline process. For loans within a set number of points above or below the cut-off, most banks may also perform a judgmental review and, at times, may choose to override the decision of the scorecard.

The calibration of scoring models on small businesses is a widespread technique both in Europe and in the United States. Studies have found that scoring is a low-cost method of evaluating small business credits. External providers charge only a modest fee for a score and the models provide quantifiable information on expected delinquency and loss rates. Studies have found that small business credit scoring has been associated with an increase in lending to SMEs in the U.S., although this finding may relate more to the cost advantage of scoring than to a decline in actual information opacity (*e.g.* Berger, Frame, and Miller; 2005). The empirical findings also suggest that larger banks have adopted the approach much sooner than smaller banks (*e.g.* Akhavein, Frame, and White; 2005).

As far as credit risk assessment is concerned, it should be emphasised that within the Basel II Accord framework credit institutions will have incentives to develop rating scales for SMEs having recourse to bank lending over a certain threshold (this will apply more to “medium” than to “small” companies). Credit rating methodology is based on methodologies combining quantitative and qualitative data and, in the end, a human assessment. It differs from credit scoring to the extent that it avoids the “back box effects” of credit scoring models.

These “black box effects” are a limitation of credit scoring models that has to be taken into account insofar as it may put at risk the transparency of the relationship between SMEs and their banks. Banks are more likely to explain to SMEs the rationale for not granting access to credit if they can base their decision on a rating, while they may have difficulties in justifying the outcome of a scoring model. Moreover, scoring tools are based on statistics, *i.e.* the “classification error” may cause a SME willing to have access to financing to be eliminated due to a classification error. This error is generally around 20%, that is to say one SME out of five.

Therefore, credit scoring techniques should rather be regarded as an auxiliary tool in the process of credit granting, rather than the cornerstone of a credit selection process.

Securitisation

The development of an active secondary market to facilitate securitisation has been touted for some time as a means of improving the flow of capital to SMEs. By enabling primary lenders to structure secondary market transactions that use small business loans as collateral, securitisation would provide an additional source of liquidity and free lenders to make new loans, as the securitised loans would be removed from their balance sheets. In the United States, which has had extensive experience with off-balance sheet securitisation techniques, the Riegle Community Development and Regulatory Improvement Act of 1994 was intended to reduce regulatory impediments to the securitisation of conventional small business loans. However, the growth of an active secondary market for such credits has shown little progress in the past decade or so.

Owing to limited standardisation, little, if any, information about the credit histories of different types of small business loans or small business borrowers has been systematically compiled and made available to credit-rating firms and investors. Consequently, cash flows for a pool of such loans would be difficult to predict, because of the heterogeneity. To rate a pool of small business loans, credit rating agencies would typically require three to five years of financial performance history. The data provided would have to include information on the total number of loans, outstanding balances, collections, delinquencies, write-offs, recoveries, etc. In the absence of adequate information of the sort regarding the credit performance of a pool of loans, loss probability distributions cannot be reliably estimated. Faced with this uncertainty, rational investors would fear that a lender would have incentives to securitise its poorer quality loans and, consequently, would add a large discount to the implicit price at which the assets are purchased as compensation for the uncertainty about the true credit risk of the assets in the pool.

Off-balance sheet securitisation, in contrast, has typically been used for assets for which the costs of acquiring and disseminating information on loans and borrowers to rating agencies and investors is low, a result of standardised loan underwriting criteria and advances in information technology, which have made it easier to estimate default probabilities and payment patterns under a variety of economic conditions. Where that is the case, securitisation can result in lower interest rates for borrowers whose loans are eligible for securitisation, increased liquidity for lenders and, thereby, increased availability of credit.

In a 1996 Report to the Congress by the Board of Governors of the Federal Reserve System and the U.S. Securities and Exchange Commission,¹⁵ the agencies reported that the increasing use of scoring techniques for SME loans could eventually result in pools of

loans that are good candidates for securitisation, as the underwriting criteria for such loans would tend to be relatively standardised across lenders. As well, scored loans can come from a wider geographic area, which would aid diversification. Some loans have been securitised, but these have mainly been guaranteed portions of loans backed by the US Small Business Administration.

Official support for SME lending

Governments in many countries have been convinced that there are market imperfections in the extension of credit to SMEs that are serious enough to justify government intervention. Thus, countries have launched a number of programmes to utilise public funds in order to facilitate SME lending. Two approaches are considered in this section, development banks and loan guarantee programmes.

Development banks

Many governments have established development banks that operate on a local, regional or national basis. In Germany, for example, a number of regional and specialised banks are key lenders in the SME sector, with the *Kreditanstalt für Wiederaufbau (KfW)* as the best known. The KfW, which is expected to earn a sufficient return to cover costs, including loan losses, generally lends at fixed interest rates for up to six years, although some loans have maturities of up to 20 years. Part of the reason for the long-term success of the KfW loans is the procedure whereby assessment and evaluation are undertaken by private banks. The German model has generated considerable interest elsewhere in Europe partly because of the role played by state-backed banks, but also because German banks have a long history of providing long-term debt facilities to their customers, with use of public equity markets being relatively limited. At the same time, no evidence exists that the rates of interest charged to SMEs are significantly lower in Germany than in other markets (Deakins and Philpott, 1993).

Loan guarantee schemes

Since lenders face fixed costs in lending, lending is typically more expensive per unit lent for SME loans, which are much smaller in size than corporate loans. The higher costs are normally factored into the loan fees. As well, in the typical SME lending environment, lending favours borrowers with collateral, rather than those with the most promising business project. The provision of collateral would be particularly difficult for start-ups and other relatively young enterprises. Consequently, governments of OECD countries and elsewhere, along with trade associations and other local entities, have launched a number of programmes to utilise public or collective funds in order to facilitate SME lending.¹⁶ By providing external credit support in place of collateral from the SME, loan guarantees would appear to resolve at least two funding difficulties for SMEs: 1) situations in which the risk premium demanded by lenders is high, such that the cost of funds is prohibitively expensive for some SME borrowers; and 2) cases in which SME borrowers lack sufficient collateral to qualify for loans under the lenders' existing terms.

Although the specifics of support programmes vary, there are two main types of guarantee schemes: *mutual guarantee associations*, which are established by groups of SMEs, by business foundations, or Chambers of Commerce, often in collaboration with

banks, and *loan guarantee funds*, which are most often publicly funded by regional or national authorities. Government guarantee schemes typically involve formulas under which banks share the risk with the official guarantor and in which the interest rate paid includes a premium to compensate the authorities for providing the guarantee. There is a requirement that the credit guarantee scheme covers costs and, in most cases, that it does not represent a drain on budgetary resources and that it benefits the targeted audience.

This latter criterion has sometimes been a sticking point. In the United Kingdom, for example, a report on the Small Firms Loan Guarantee concluded that the programme as currently administered was costly, complex, and failed to address adequately the needs of those SMEs most in need of support, namely, start-ups and young businesses (Graham, 2004). These are the firms most likely to lack sufficient collateral, which appears to be the main drawback for SMEs in securing financing. A study of the state-funded credit guarantee scheme in Italy draws somewhat similar conclusions (Zecchini and Ventura, 2006). The programme in Italy has a number of interesting features, including the fact that it includes both a public loan guarantee component and a mutual guarantee component, the *considi* system. From a cost perspective, the Italian scheme appears to be successful. The default experience is lower than in the banking system and performance in general is better than the European average. However, the scheme's superior default performance owes, in part, to the fact that any payout to banks occurs only after the debt recovery process has been executed and also to the fact that the scheme has not actually targeted the most financially disadvantaged firms within the SME sector. Nonetheless, funds have been directed to less developed regions of the country, and the scheme has succeeded in lowering costs and increasing the flow of credit to SMEs. Still, there may be a need to ensure that funds in the future are directed to those firms that are most financially constrained. In Japan, similar conclusions may be drawn. Japan's special guarantee programme there did contribute positively to the availability of long-term funds and to some improvement in efficiency. The evidence suggests that government interventions in the credit market can be justified, but that detailed cost-benefit analyses are needed.

The examples above are like most government sponsored schemes, in the sense that they are administered by commercial banks, with lending decisions made by the banks. These support schemes are used most often in cases in which the banker believes that the project in question is likely to be commercially viable but where collateral is insufficient. The bank may choose to propose that the SME utilise a loan guarantee scheme in which funding is made available to the business but at a higher rate of interest. Interest from this higher margin is then used to offset defaults associated with these loans. The proportion of the loan which is guaranteed by the government and, hence the default amount having to be covered by the public purse, generally varies from 60 to 90% of the loan, with the remainder of any loss absorbed by the bank.

In sum, differences of opinion still exist, but there is considerable support for the view that government guarantee programmes can be effective policy measures for directing funds to the SME sector. There is a need, however, for programmes to focus on segments of the broader SME population for which there are few financing alternatives, bearing in mind the need to ensure that the loan-loss experience remains within an acceptable range.

Gaps in SME lending

In modern financial systems, surplus funds may pass from “savers” to borrowers through intermediated channels (*e.g.* banking, securitisation) or may be allocated directly to borrowers. At its core, the process of financial intermediation is about processing information of one form or another. Indeed, in the traditional theory of financial intermediation, financial intermediaries exist only because of market imperfections, in particular, the asymmetry of information between savers (sources of funds) and borrowers (users of funds). The theory concedes that banks and other intermediaries add some value via diversification (*i.e.* expanding the investment choices available to savers and the sources of credit for borrowers, as well as the traditionally important role of management and diversification of risk) and by transforming financial contracts and securities of one form (*e.g.* maturity, etc.), into another, but concludes that intermediaries capitalise mostly on their possession of superior information.¹⁷ They also reduce the risks that funds are mismanaged by monitoring investments more efficiently than individual savers would be able to do. As well, intermediaries may be more efficient than individuals in allocating funds to their most efficient uses.

In examining the financial intermediation process it is important to note that, because the supply of credit is not inexhaustible, there will always be some borrowers whose demand for credit is not satisfied, at least not in full or on terms they consider appropriate. That outcome results from the normal operation of the credit allocation process.

Assessing higher interest charges and fees for borrowers considered to be risky is the norm in commercial lending, but while interest charges and other fees and monitoring address some risks, they do not completely eliminate them and loan originators in some circumstances may be inclined to restrict lending to address risks above a certain level, either by cutting back on the amount of credit extended or by denying credit altogether for certain categories of borrowers. In the competition for credit, borrowers whose credit risk is relatively easy to assess have the advantage, while entities such as SMEs are more likely to have their requests for funds denied. In fact, even in banking markets that are fully competitive and have no major structural distortions, SMEs may well be at a considerable disadvantage in obtaining financing compared with more established companies. Obviously, the possibility that large numbers of small firms will be excluded from the credit market becomes even higher as market imperfections gain in significance.

The credit intermediation process seeks a successful balance between risks and expected rewards. Commercial lending is not about giving loans to everyone who demands one. Policy concerns arise, however, when the intermediation process results in an inefficient allocation of capital or when particular subsets of the borrowing public are systematically denied access to finance. If, for example, firms denied access to finance have projects whose risk-adjusted returns are higher than those approved by lenders, then capital is not being allocated efficiently. Arguments to this effect are frequently made concerning SMEs, in particular, that there are systematic gaps in the debt market for SMEs.

Although there is no commonly agreed definition of this gap, the term is typically meant to imply that a sizeable share of otherwise economically relevant SMEs cannot obtain financing from banks, capital markets or other suppliers of finance for their “viable” projects. Because the measured flow of credit would be affected by changes in either the demand or the supply of credit, in defining a financing gap it is necessary to

distinguish between the two. In practice, this generally has entailed making assumptions about the demand for credit, and attributing any shortfall in actual credit flow to supply-side factors. It is not clear that this determination *necessarily* entails some form of credit rationing, but the phrase is often applied to a refusal on the part of lenders to extend credit, irrespective of both the margin over the current market rate borrowers are willing to pay or their underlying creditworthiness. Various subsets of SME borrowers are cited, including small firms, risky firms, and firms in knowledge-based industries.

A conclusive determination regarding credit rationing would require micro data on factors behind rejections of loan applications, which are typically not available, so most observations are based on survey results. In a number of high income OECD countries, such results lead to the general conclusion that there is little evidence of an overall scarcity of financing for SMEs. This finding has been confirmed, for example, by continuing surveys on SME finance undertaken in several countries. In the United Kingdom, for instance, the Bank of England Survey of SMEs for 2004 found that about 80% of SMEs use external finance, but most SMEs had not sought new external finance in the preceding three years. The reason for not seeking new external finance was the absence of need (Bank of England 2004 Main Report). The Canadian Survey of Small Business report has arrived at rather similar conclusions. Most SMEs use external finance. Of those who seek external credits, the rate of acceptance is high. The most commonly cited reason for not requesting additional financing was lack of need. Similar conclusions emerge from surveys in other developed economies.

In the major OECD countries, the private credit market, with a moderate amount of official assistance, has apparently succeeded in providing sufficient financial resources to the SME sector broadly defined, such that no generalised financing gap can be identified. Competition has spurred financial institutions to devise innovative solutions. In this environment, product innovation in the private sector, combined with a measured amount of public support, have enabled the financial system to surmount the information and agency problems that characterise SME lending. The lone exception to these conclusions would appear to be the subset of SMEs containing innovative firms.

The same positive assessment does not necessarily apply in the case of emerging economies and developing countries. In some countries, the majority of SMEs appear to face a persistent challenge in obtaining credit. It is important to decide whether this problem can be corrected simply by introducing an improved framework for SME finance or whether broader structural problems need to be addressed. The macroeconomic policies that lead to excess demand for domestic savings, regulatory and structural policies that favour larger enterprises or provide incentives for SMEs to remain in the informal economy, and patterns of ownership, governance and supervision that discourage banks from lending to SMEs are all contributing factors.

Impediments to financing that are sufficient to create a situation in which large numbers of economically significant SMEs cannot obtain financing from formal institutions are more likely to be found in emerging markets than in more advanced economies. Emerging markets are more likely to have macroeconomic imbalances that lead to excess demand for available domestic savings as well as institutional weaknesses that encourage large numbers individuals to engage in low productivity, informal activity. Finally, financial systems in emerging markets are often characterised by less deregulation, openness, and reform of ownership governance and supervision. There are persuasive reasons to believe that when the institutional and financial framework is weak, SMEs will be adversely affected to a much larger degree than larger firms¹⁸.

Assuming that this assessment is correct, any recommendations for reforms in the structure of policies to support SME finance should begin by emphasising the need to address imbalances in the wider business environment. As long as such impediments exist, the demand for credit is likely to exceed supply by a wide margin. This being said, it is still an important priority to design a system of SME financing that advances the objective of facilitating SME access to financing.

Notes

1. Policies that distort urban/rural prices will typically encourage migration into the urban informal sector. Since growth in employment opportunities is often more limited in larger established companies, individuals displaced by an unfavourable rural/urban price relationship often engage in low productivity activities as entrepreneurs in the informal sector.
2. Various procedures may exist for addressing problems in insolvent firms or firms experiencing other forms of financial distress. The methods vary in severity depending on differences in assessments of the troubled firm's prospects. For example, to address a temporary problem of illiquidity, an infusion of liquidity or rescheduling of debt may be all that is required. In the case of obligations to banks, procedures for debt recovery are typically written into loan contract terms and may include the takeover or sale of assets that have been pledged as collateral for the loan. Insolvency procedures evolve into a formal bankruptcy process when legal proceedings are instituted to force the liquidation of an insolvent firm's assets to satisfy the claims of various creditors and other stakeholders, either in whole or in part according to the priority established under the terms of agreed contracts or under law.
3. If the borrower became subject to bankruptcy or reorganisation proceedings and the lender's interest in the assets were not perfected, then all cash flows arising from the underlying assets could become subject to the insolvency proceedings.
4. The transactions themselves may take place on a bilateral basis (*e.g.* over-the-counter fixed-income trades or off-exchange equity trades), but occur more often on more formalised platforms such as registered exchanges.
5. For example, market-based finance has historically played a much greater role in the United States than in Continental Europe and Asia, where companies generally have relied on close banking relationships for their working capital and strategic funding needs. For instance, in the mid-1990s banks supplied more than 70% of corporate debt in Italy, Germany and France, compared with a share on the order of 22% in the United States. The bank share in much of Asia was comparable to or even greater than in Continental Europe. This ranking owes in part to the relatively higher proportion of small to medium-sized enterprises and family-owned businesses among Asian companies. Such businesses are naturally inclined to favour the support of relationship lending, so banks do the bulk of the credit analysis.
6. Note, that if depositors are fully insured, they may have little incentive as well.
7. In that vein, La Porta *et al.* (1997, 1998) show, for example, that legal systems that rigorously protect creditors and enforce contracts encourage better functioning debt and equity markets than legal systems that are more lax in this regard. In particular, the authors conclude that poor legal institutions result in high levels of ownership concentration, limited availability of external equity financing, narrow equity markets and small-sized debt markets.
8. Bank loans tend to be relatively short term, involve extensive covenants, and may be frequently amended. Public debt offerings, by contrast, tend to be longer term, involve relatively loose covenants, if any, and are rarely restructured, except perhaps in times of dire financial stress.

9. There are three basic types of loan covenants: affirmative covenants, negative covenants, and financial covenants. Affirmative covenants require the borrower to comply with certain basis standards such as making timely payments of interest charges and fees, paying taxes, obeying applicable laws, etc. Negative covenants, conversely, proscribe certain activities, such as asset sales, acquisitions, debt issuance and other transactions that could prove detrimental to the lender(s). Compared to affirmative covenants, negative covenants are much more highly structured to meet the borrower's specific circumstances. In addition to these structural covenants, bank loans typically contain various financial covenants as well, which establish performance criteria that the borrower must satisfy. Financial covenants may establish minimum levels for such measures as cash flow to debt service, liquidity, equity or tangible net worth, or set ceilings for leverage and levels of capital expenditures.
10. According to a report by the European Commission on European SMEs, banks receive balance sheet information and profit and loss statements from only about two-thirds of their SME clients. Documents such as budgets and financial plans are seldom provided.
11. Microfinance refers to loans, savings, insurance, transfer services and other financial products targeted at low-income clients. Microcredit is a small amount of money loaned to a client by a bank or other institution. Microcredit can be offered, often without collateral, to an individual or through group lending. Group lending, also known as solidarity lending, is a mechanism that allows a number of individuals to provide collateral or guarantee a loan through a group repayment pledge. The incentive to repay is based on peer pressure; if one person in the group defaults, the other group members make up the payment amount. Individual lending, in contrast, focuses on one client and does not require other people to provide collateral or guarantee a loan (www.yearofmicrocredit.org).
12. One study found that in the United Kingdom, SMEs are net extenders of trade credit compared with larger enterprises (Storey *et al.*, 1987).
13. *Banque de France* Central Balance Sheet Data Office has pioneered the calibration of credit scoring for manufacturing SMEs as from 1982. The score was first intended to be communicated individually to firms which volunteered to be registered in the *Centrale de Bilans*, in order to help them assess their credit position and have a sound discussion basis with commercial banks. Subsequently, these scores have been disseminated to credit institutions (see Bardos M., "Detecting the risk of company failure at the *Banque de France*" *Journal of Banking and Finance*, 22 (1998) pp1405-1419). In Italy, the Torino based *Centrale dei Bilanci* also developed credit scoring models for credit institutions in the 1980's. In the US San Rafael, California-based Fair, Isaac and Company introduced its Small Business Scoring Service during this period. The SBSS was designed initially for use with credits up to USD 250 000. Since that time, many different types of scoring models have been developed, including (in addition to application models) models for credit bureau risk scores, credit bureau bankruptcy scores, collections, payment projection, and recovery among others.
14. Statistical odds are one way of measuring risk, where the odds reflect the ratio of so-called "goods" to "bads". "Goods" in this context might refer to the absence of delinquency or no more than an isolated 30-day delinquency, while "bads" might be defined as bankruptcy/foreclosure, charge-off, write-off or default, although many banks simply use 90-days delinquent or the likelihood that an account will go bankrupt within a given period of time as their definition of "bad".

15. Report to the Congress on Markets for Small Business and Commercial-Mortgage-Related Securities, Board of Governors of the Federal Reserve System and US Securities and Exchange Commission, September 1996.
16. In the United States, the Small Business Administration provides guarantees for loans made by banks to firms that qualify under its lending programme. Similar arrangements exist in Germany, Italy, Japan, Korea and the United Kingdom.
17. See the discussion by Bert Scholtens and Dick van Wesveen in “A Critique on the Theory of Financial Intermediation,” *Journal of Banking & Finance* 24 (2000), 123-125.
18. Research undertaken at the World Bank and the University of Maryland indicates that in cases where the legal and financial systems are weak and where corruption is relatively high the SME sector is disproportionately affected. See Beck, Demirgüç-Kunt and Maksimovic (2002).

Chapter 3

Risk Capital and Innovative SMEs

Chapter 3 will focus on risk capital, emphasising the one category of SMEs that has been identified as challenging in a large number of countries: “innovative SMEs” or ISMEs. The report first identifies the special difficulties such companies present for investors. In brief, these companies present higher than average risk and uncertainty. Offsetting this risk is the possibility to achieve higher than average returns. The chapter will discuss the contribution that risk capital markets (in particular, business angels, venture capital, and “growth” exchanges) can make to the financing of this sector. It will also discuss why development rates of dynamic SMEs, and also financing vehicles associated with the sector, vary so widely among countries. Finally, this section will propose steps that entrepreneurs, investors and governments can take to stimulate development of risk capital. The chapter will also briefly address the issue of valuation and definition.

Main conclusions and recommendations for the development of risk capital of Chapter 3:

- Create a social and economic climate conducive to the emergence of centres of high technology investment. In addition to the general climate hospitable to entrepreneurship, protection of intellectual property and industry/government/university linkages in research are particularly important.
- Take note of the need to develop a range of appropriate financing mechanisms at all points along the “financing ladder”. The success at each stage of the ladder partly depends upon the perceived ability to progress to the next stage.
- Create special public funds through which public sector entities can make equity investments in ISMEs in partnership with private investors.
- Observe the principle of “risk sharing.” Use official funds only in partnership with businesses, universities or international organisations. After the preliminary stages of firm development, commit government funds only when private investors are willing to commit funds. Enable private investors to make project selections and to keep the ‘upside’.
- Be careful about policies that provide access to low-cost funding but reduce rates of return for investors. Policies that diminish returns to investors will discourage private investors. Projects should be able to generate earnings in a competitive market.
- Be sure that the tax system does not inadvertently place ISMEs at a disadvantage. Consider preferential tax treatment for investment in ISMEs.
- Specific recommendations concerning early stage financing, venture capital, exiting mechanisms can be found in the Chapter.

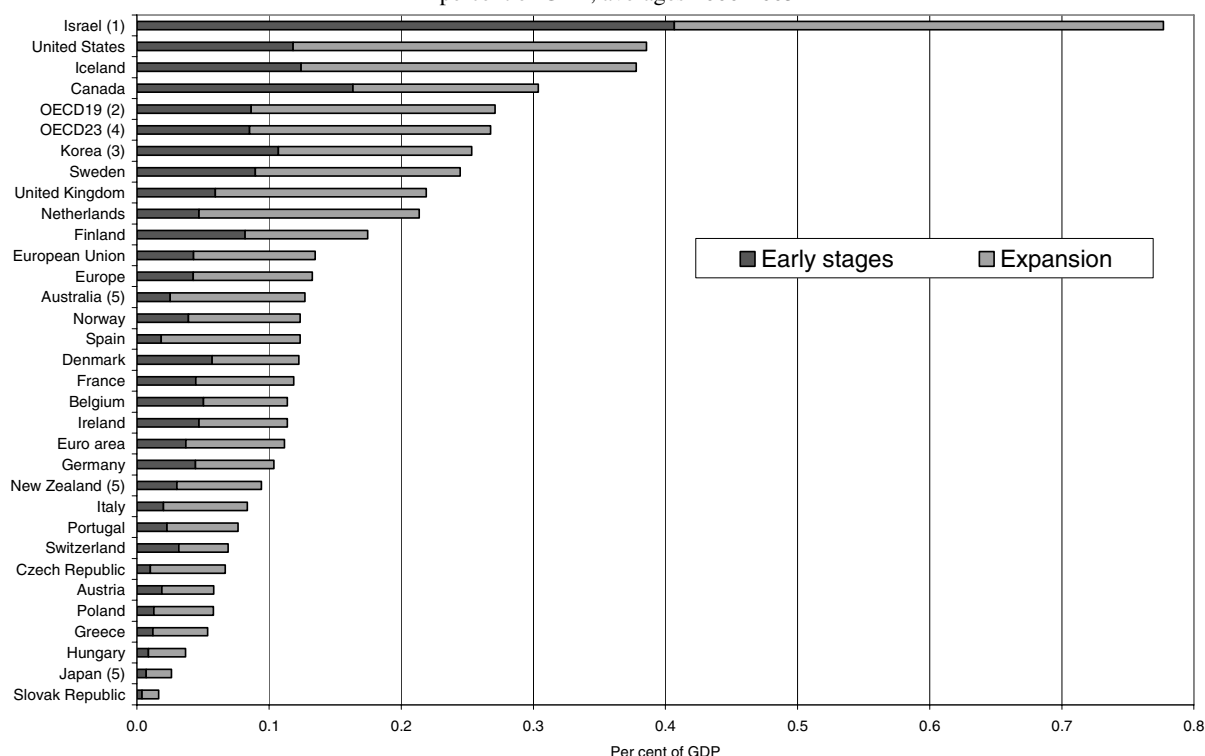
Introduction

This chapter analyses the challenge of providing risk capital to “innovative SMEs” (ISMEs). While ISMEs only account for an extremely small share of all SMEs in any country, they have the potential to yield disproportionately high benefits in creating new employment and introducing cutting-edge technology into the economy. Therefore, governments have made it a specific policy aim to foster the development of this kind of enterprise, partly by assisting the development of appropriate financing techniques.

In the following sections, key elements in the process of financing ISMEs will be analysed. At the end of each section some recommendations will be made identifying measures that can be taken to strengthen each link in the chain of ISME investing.

The process of investment in ISMEs is sometimes loosely referred to as “venture capital”, but as explained below, venture capital is only part of the larger process and is relevant only in the relatively later stages of this process¹. Moreover, it is frequently argued that equity is the most appropriate form through which ISMEs should be financed. While equity is the most commonly used form of finance for ISMEs and is likely to remain so, other products such as “mezzanine finance” and “hybrid products” combining equity with other forms of investment are sometimes used. Thus, the expression “risk capital” is used to designate the entire process of financing ISMEs. Not only is the ISME sector seen as critical, but rates of development of this sector vary widely among OECD countries. This can be seen in Figure 3.1, which compares the development of early and expansion stage venture capital in key countries.

Figure 3.1. Venture capital investments by stages
In percent of GDP, averages 2000-2003



Notes: (1) 2000-2002; (2) Europe, Canada and United States; (3) 1998-2001; (4) Europe, Czech Republic, Hungary, Poland, Slovak Republic, Canada, and United States; (5) 1998-2001.

Source: OECD, based on data from EVCA (Europe); NVCA (United States); CVCA (Canada); Asian Venture Capital Journal (The 2000 Guide to Venture Capital in Asia).

Among OECD members, such investment ranges from 0.4% of GDP in countries such as Canada, the United States and Iceland, to barely one-tenth that size in OECD countries with less developed venture capital sectors. Israel, which is not an OECD member, has an even larger share of venture capital to national income. This wide discrepancy has persisted even as the entire venture capital sector underwent some fairly sharp gyrations during the past decade.

Believing that the slow development of the risk capital sector has widespread negative consequences, many OECD countries as well as the European Union have made it a high priority to develop their risk capital sectors. For example, the European Union in 1997 formulated a Risk Capital Action Plan (RCAP) designed to reduce the “risk capital gap” with the United States and thereby to enhance the competitive position of EU members.

Special characteristics of risk capital

As noted in Chapter 1, ISMEs are not well suited to the traditional forms of debt finance that are used by most SMEs. Even the small capitalisation stock markets that are useful to many SMEs are not entirely relevant. Instead, a special set of techniques adapted to the particular needs of ISMEs is the solution. Traditional SME finance essentially seeks to finance a static or slowly growing company. Once an SME has attained a viable size and attains positive cash flow, the company utilises a fairly standard range of products such as bank loans, asset-related finance, and government programmes. Expansion can be considered using financing mechanisms such as term loans, bonds, or public listing on an exchange (or section of an exchange) specialising in smaller companies.

By contrast, the goal in financing ISMEs is to progress along a financing continuum from informal finance, through various phases of formal finance, culminating in entry into the formal regulated capital markets. In this process, finance often acts as a catalyst in developing and commercialising emerging technology and shortening product development cycles. It has also stimulated research that supplements research in university, government or corporate R&D departments.

A key reality is that ISMEs require funding for a period during which they are not generating sufficient revenues to cover expenses. Moreover, even when ISMEs begin to generate revenue, the need to re-invest heavily in the company means that the company will have negative cash flow for prolonged periods. Thus, risk capital usually assumes that the project will require multiple rounds of injection of outside funds.

This ISME investor has had distinctive means of operating in comparison with other equity investors. In risk capital, the investor selects a portfolio of firms with the knowledge that there is a strong probability that many, if not most, firms will not be successful and the investment in them will be lost. At the same time, the returns on a small number of companies in the portfolio that prove to be highly successful will be sufficient to compensate the investor for individual losses. Such a system obviously needs a high degree of transparency and a high degree of confidence that the outside investor will be protected.

Three closely interconnected forms of investment are especially relevant to financing such firms:

6. **Business angels**, or informal equity finance provided by individuals on relatively flexible conditions. The classic business angel is a successful former entrepreneur who has realised profit from initial ventures and contributes both capital and coaching skills.
7. **Venture capital** is a more structured technique to provide risk capital to emerging high-growth companies.
8. **Growth equity markets**. A certain number of high-growth companies eventually achieve listing on specialised exchanges or specialised parts of exchanges that are reserved for high-growth companies. The archetypical system for listing such companies is NASDAQ in the United States, but several exchanges (or sections of exchanges) dedicated to emerging companies are found in other countries.

Geographic proximity

Geographic proximity is an ingredient in building an environment conducive to ISME development. Investors must remain in ongoing communication with technical innovation, innovative entrepreneurs and the marketing plans of competitors. Therefore, these investors, as well as the entrepreneurs they support, tend to be located near “technology clusters”, concentrated in areas near universities and other research facilities. In the United States, the classic examples are “Silicon Valley” in California and similar locations in the Boston area. This tendency is often reinforced by policies to build “science parks”, often close to universities and research facilities. Similar clusters are found at various locations in the United Kingdom and in continental Europe. In recent years, clusters have been developed in Bangalore, India and Shanghai and other places in China.

The geographic concentration of ISMEs and the close connection between the financial aspects and non-financial aspects of ISME investment suggest that the most important precondition for a successful system of ISME finance is the broader social, technological and business environment in which the ISME operates. It is not completely agreed what makes some regions successful centres of technological innovation and finance, but a general notion is given in Box 3.1 which is based upon an exercise undertaken by a group of venture capital experts with experience in several world markets for ISME finance.² The objective of the enquiry was to specify the conditions under which China could emerge as a “technology hotbed”, but the analysis of the conditions which constitute such an environment has global implications.

In a similar vein, Robert Huggins Associates, a well known international consulting firm, produces a World Knowledge Competitiveness Index (WKCI) which compares 125 regions in North America, Europe and Asia Pacific in terms of their competitive position as centres for knowledge-based economic activity. The index uses 19 variables such as employment in the knowledge economy, patent registrations, R&D investment by public and private sectors, information and communication technology and access to finance. Silicon Valley scores the highest globally, with US regions achieving the seven highest scores. In Europe, Stockholm scores highest with Nordic countries generally scoring well (Robert Huggins Associates, 2005). Many of these locations are not in the traditional financial centres of their own countries, suggesting that geographic proximity to entrepreneurs and researchers is more crucial than proximity to traditional providers of finance. To the degree that it is within its power, one of the best contributions that government can make to the process of ISME finance is to create an environment that

favours the emergence of “technology hotbeds.” Of course, to the degree that certain regions emerge as successful technology hotbeds, other regions will be at a disadvantage when attracting ISMEs.

Box 3.1. Criteria for the development of a successful technology hotbed

Capital sources

Business angels, venture capital and private equity

Intellectual capital

Universities, research institutions, pillar companies

Social dynamic

Entrepreneurial climate, new business creation

Tax legal regulatory environment

Property rights (including IP rights), tax incentives

Infrastructure

Legal, accounting, finance, transportation and communications

Market

Market for technology products

Environment

Pleasant environment, role models, success stories, political stability

Source : Adapted from Ernst & Young, 2005.

The policy implications are not always straightforward. Sweden, which is reputed to have a tax system and other policies designed to produce social egalitarianism that would not appear to be favourable to entrepreneurship and risk taking, scores high on the WKCI index and also has a comparatively well developed venture capital sector. China and India are making rapid strides in attracting venture capital investment despite significant problems in the market infrastructure in areas such as bureaucratic rigidity, uncertain legal environments, and spotty records concerning the equitable treatment of foreign investors and the protection of intellectual property (World Bank, 2005.) In fact, several Asian regions that are now significant technology centres, such as Bangalore and Shanghai, achieved low scores on the WKCI. Despite these apparent paradoxes, it is plain that location is a critical element in the development of ISMEs and, hence, efforts to identify and quantify the elements that make for a successful location are useful.

Valuation and control

Business angels and venture capitalists, who are intermediaries specialising in ISMEs, use distinctive techniques to bring together researchers, investors and entrepreneurs. These techniques address some of the challenges of investing in ISMEs, such as asymmetric information, agency problems, valuation and control problems, and monitoring difficulties.

Investment in ISMEs involves closely held companies in their formative phases, and standard models of ownership and governance of established companies are not fully applicable. The worth of the enterprise is closely linked to intangibles, particularly the market potential for untried ideas and the capability of the managers to take the firm from the state of conceptualisation through to marketable outputs. These investors tend to own significant shares of their portfolio companies, while the entrepreneurs are usually both owners and managers. These investors usually have seats on the boards of directors of their portfolio companies and are expected to fulfil a “coaching” function. Operations are often syndicated, meaning that the lead investor will bring other investors into the investment in order to diversify risk and add to the levels of scrutiny to which the firm is subjected.

Principal/agent problems are commonplace. The investors and the entrepreneurs sometimes vie for control over the company. In many countries, existing owners of all companies, sometime hesitate to seek public listing and/or to bring new owners into their company. The original owners, sometimes a family or other close-knit group, resist the intrusion by outside parties. This problem is characteristic of many companies, not only ISMEs. In ISMEs, the problem may be compounded because the original entrepreneur may be an individual with innovative ideas and unique technical knowledge of a new product. Understandably, such persons are reluctant to turn their company over to professional managers and to cede control to venture capitalists. In fact, the pattern of original investors being replaced by outside managers is rather common in venture capital.

Remuneration of all parties is typically linked to the success of the company. Unlike established companies, with comparatively strong hierarchies where employees are mainly compensated through basic salaries, each worker’s reward is closely tied to the team’s ultimate success. Stock options are commonly used to align the interests of workers and owners.

Valuation is also a crucial issue (OECD, 2006). Most new investments, particularly in technology-based companies, are very hard to value due to their illiquidity and uncertain prospects. In the absence of markets for the company’s shares, the parties each have various methods of valuing the company and use these valuations as a basis for negotiations. Valuation is also a critical issue at the time of exit. To some degree, principles that should be used in valuation represent a friction in international dealings.

In the United States which has a large majority of the world venture capital activity, no generally applicable standards exist and wide disparities can be found in how different funds account for the same investment. In December 2003, the Private Equity Industry Group released the US Private Equity Valuation Guidelines (PEIGG). A comparison of the US and international guidelines is presented in Table 3.1.

The PEIGG have been formally endorsed by the Institutional Limited Partners Association, but the National Venture Capital Association (NVCA), the main industry association for the venture capital sector, has not endorsed PEIGG. Instead, it suggested that its members review the Guidelines when evaluating their valuation procedures or developing new approaches. The International Private Equity and Venture Capital Valuation Guidelines, which were finalised in 2004, were developed by a group of major international venture capital associations³. The Guidelines are designed to be consistent with International Accounting Standards and are endorsed by many national and regional venture capital associations. The Group also created an independent board, which is accountable to a general assembly, to monitor market practices in the use of the guidelines along with the evolution of global accounting standards.

Table 3.1. Comparison of valuation guidelines

Category	United States Private Equity Industry Guidelines Group	International (EVCA/BVCA/AFIC)
Underlying principles	Fair value, GAAP, consistency, transparency, prudence.	Fair value, IFRS and GAAP, consistency, best practice.
Period of valuation	Update on a quarterly basis and perform a rigorous review of valuations on an annual basis – or more frequently when required by the fund agreement.	At least every six months and fund manager can elect for a quarterly reporting. [In practice in Europe, the quarterly reporting is the most applied.]
Definition of fair value	“The amount at which an investment could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.”	“The amount for which an asset could be exchanged between knowledgeable, willing parties in an arm’s length transaction.”
Use of cost basis	Cost (or most recent financing) “may approximate fair value for some time period” unless a “material change in value” has occurred. Examples, when there is a significant improvement or deterioration in performance or market condition consideration should be given to review and adjust carrying values upwards or downwards.	Cost (or most recent financing) remains “appropriate” typically for a period of one year.
Valuation methodology (brief definition of each methodology, see Attachment)	Prescribed hierarchy of methods: • Comparable company transactions - examination of third party investments/transactions in comparable equity securities. • Comparable performance multiple – application of most appropriate and reasonable multiple derived from market-based conditions or recent private transactions. • Other methodologies including discount cash flow (involves amount, time value and appropriate discount rate), net asset (deriving value from tangible assets rather than performance) and industry-specific benchmarks, <i>e.g.</i> multiple of revenue, price per subscriber, etc.).	More flexibility in selection of method to fit context but preference for methods “that draw on market-based measures of risk and return” (<i>e.g.</i> comparable public company multiples).
Marking down impaired investments	“Decreases in value may be more easily identified and justified than increases in value.”	If fair value of such investments cannot be reliably measured, estimation of impairment can be based on “an intuitive rather than analytical” and may involve reference to broad indicators of value change (<i>e.g.</i> stock market indices).
Discount for restricted shares - public securities	Typically range from 0% to 30%	Range from 0% to 25%

Note: EVCA - European Private Equity and Venture Capital Association; BVCA - British Venture Capital Association; AFIC - Association Française des Investisseurs en Capital
Source : OECD, 2006.

Ascending the financing “ladder”

In order to have a thriving system of ISME finance, it is important to have a range of options for firms as they progress through the business life cycle. Experience shows that sources of financing for all firms tend to evolve according to the nature of the firm and over the life cycle of the firm and different problems arise as firms approach new phases and deal with newer kinds of investors.

Gaps at any point in the funding cycle can leave the entire sectors in an undeveloped state. A conceptual presentation of the life cycle of an ISME and its recourse to external finance, with an indication of the issues that are likely to arise at each stage, can be seen in Table 3.2.

Table 3.2. Funding sources for ISMEs

Phase	Suppliers of Funds	Preconditions
SEED	Personal assets Family & friends “Type ii” individual investors Academic & professional colleagues Government & university grants Endowments and foundations Seed funds	Framework for entrepreneurship Business/government/research links Government & university support for applied research
START UP	Family & friends “Type ii” individual investors Academic & professional colleagues Government & university grants Business angels Venture capital Endowments and foundations	Robust legal system Enforceability of contracts Efficient bankruptcy regime Support facilities Science parks/incubators Favourable tax environment Business angel networks
EXPANSION	Business angels Venture capital/private equity/mezzanine finance Pension funds Endowments and foundations Corporate venturing Government Foreign venture capital	Institutional savings Sufficient volume Flexible regulation Legal framework Tax transparency
EXIT	IPO Institutional investors Retail investors Trade sale Strategic investors (M&A) Private equity	“Growth” exchanges Environment for M&A
PUBLIC LISTING	Institutional investors Retail investors	Legal and regulatory framework for investment

Like SMEs, most ISMEs initially depend upon informal financing raised by the entrepreneur or his/her friends, family, and business or academic associates before turning to outside sources of finance. Usually, the company has no financial statements and no track record, and hence, financing from traditional sources is scarce. Funds provided by governments as grants or through seed capital funds can be partnered with other suppliers of early stage funding such as those supplied by universities, endowments and local authorities. Funds are mostly used for development of product prototypes and feasibility studies.

Government programmes, which make grants available to encourage very early stage applied research leading up to proof of concept, can be effective at this stage. The possibility of raising funds from research grants may be important catalysts. Grants that have been vetted by governments or universities sometimes give a “badge of credibility” to an entrepreneur seeking capital.

Innovations of the past few years that have facilitated early stage investments include “seed funds” which make small amounts of money and support available for pre start-up preparation of business concepts and business plans and “incubators.” The latter, which are often attached to science parks, provide facilities in which technical projects and business plans can be elaborated and management teams assembled. Some of these facilities are supported only by private funds but most use public funds as well.

Business angels often play key roles in the early stages of the life of the firm. Business angels are individuals with business experience and capital to invest who actively seek opportunities of all types among newer enterprises and who also play an active role in the development of products and the management of the company in its early phases. Venture capitalists often enter the firm at the middle to later stages of its life cycle.

After the preparatory phases, companies proceed to the “start-up” phase and “early stage” through one or more “expansion” or “development” rounds. In the latter stages, “quasi-equity” debt or mezzanine financing may occur along with additional equity injections. Normally, in each round, the expected rate of return diminishes, but through all phases the investor always expects a return higher than on publicly traded investments.

At the end of the process the venture capitalist aims to realise a return on the investment through “exit”. The exit may take the form of a trade sale to a company that wishes to make a strategic acquisition, a sale to a group seeking to achieve managerial control over the company (including a management buyout) or through an initial public offering (IPO). While trade sales are much larger than IPOs in volume terms in almost all times and places, IPOs are important in establishing valuation, both for listed and unlisted companies. IPOs are also important in setting standards to which newer companies can aspire, since many highly successful companies are publicly listed. Without such “exit vehicles”, venture capital cannot function.

Investment at any stage of the life cycle is frequently contingent on there being some potential to advance to the next stage. Thus, providers of funding in the seed stage and start-up phases are more likely to respond positively to business plans when they believe the proposal has the capability of attracting support of business angels. Business angels in turn will be encouraged if they believe that the project is a good candidate for venture capital financing. This process is most explicit in the venture capital process in which it is accepted that equity will be injected into the firm in successive rounds, with the objective of realising an exit through a trade sale or an IPO. The availability of capital technical

expertise and support in critical amounts and across a full range of products highlights the importance of developing “technology hotbeds” or regions conducive to knowledge-based industry.

More generally, when gaps appear at any point in the funding continuum, the capability of the system to support the emergence of high potential firms is lessened by a disproportional amount. A “funding gap” will act as an impediment to the development of ISMEs. The absence of the necessary instruments, institutions or techniques at any point of the cycle will pose a serious obstacle to the entire process of formation and growth of ISMEs.

Government support of risk capital markets: the need to consider incentives

In the belief that there are instances of market failure in the ISME financing process, many OECD countries have programmes to provide equity investments to ISMEs. Government participation can come either directly in the form of an equity participation in private sector venture capital firms or government participation in joint venture capital funds with a private party, a so-called “hybrid” fund.⁴

National and sub-national governments have provided financial support in the form of loans or guarantees. Government loans are given to small firms, for which financing from other sources is more difficult to obtain or more expensive. Guarantee schemes facilitate venture investments by lowering some of the risks involved. Guarantees may be attached to the provision of loans (usually from banks) or equity (usually venture capital). In addition to governments, international organisations are major suppliers of funding for venture capital. The European Union and the European Investment Bank have several programmes to invest in venture capital.

These schemes are often targeted to firms in an early stage of development when the firms have difficulties in attracting private capital. As private sector involvement grows, the government typically aims to phase out its programmes. Programmes usually seek to maximise private sector participation. To achieve this, government funds are often offered on a matching basis.

Public officials are usually not directly involved in the investment process. Rather, this responsibility is delegated to specialists from the private sector. In some of these schemes, the share of the government is lower than that of the private investors and most of the “upside” of the investment is transferred to the private investors. Private investors often have the option of acquiring the government’s investment at a favourable rate.

Since many governments have assigned a high priority to the development of risk capital and have made considerable sums available to support this sector, it is worth keeping in mind the need to avoid skewing incentives. Government intervention should not seek to alter the basic nature of risk capital which is that entrepreneurs must persuade investors to accept high risk in the hope of obtaining high return. As in all government programmes to support private lending, the principle of risk sharing must be observed in which the entrepreneur is expected to place funds at risk alongside those of the public agency. Project selection must be made by the private partners and the reward structure should allow the official side to obtain a reasonable return on the investment, but leaving a substantial upside potential to the private partners. Governments should also be wary about providing funds at concessionary rates. Policies that reduce rates of return below those which private investors will accept can stifle the emergence of an equity market for ISMEs.

Some countries have provided tax relief for various forms of investment in unlisted companies or in companies listed on second tier or growth exchanges. In the United States, corporate and individual investors in shares of small companies may exclude all or part of capital gains on such shares from income taxes if the investment is held longer than five years. In addition, taxes on capital gains are deferred if the proceeds are re-invested in other ISMEs. In many European countries, investors in funds specialising in SMEs or ISMEs receive a tax deduction at the time of investment as well as exclusion or reduction of capital gains taxes if specified conditions are met. Japan also provides investors with tax deductions at the time of investment as well as exclusion of taxes on capital gains.

Since venture capitalists depend upon capital gains for their income, the industry tends to press strongly for low rates of capital gains taxation. However, the empirical support for a strong correlation between capital gains taxes and venture capital investment is ambiguous. The United States and the United Kingdom, where the private equity sector is advanced, have fairly high capital gains taxes (and had even higher rates of capital gains taxation during periods when the industry grew exceedingly rapidly), while many countries with low or no capital gains taxes do not have thriving private equity sectors. Many of the investors in venture capital, such as pension funds, are tax exempt. Clearly, however, entrepreneurs, business angels and employees of ISMEs have every reason to favour such measures.

Perhaps the strongest position that the venture capital industry has taken is for favourable treatment on stock options. This technique is commonly used as an incentive for managers and employees in new technology-oriented companies. The OECD studies on entrepreneurship and the new economy recommended that members simplify the legal and tax treatment of stock options, encourage broad-based plans for employees, and ensure that their tax system is neutral vis-à-vis this form of compensation. Stock options can be granted at the time they are given to the employee, at the time the employee's right to the option is vested, when the option is exercised, or when it is sold. The venture capital industry argues that taxation should occur only at the time of sale and then at the capital gains rate, rather than the rate for ordinary income.

There are currently pressures to require companies to recognise the issue of options to be a cost of doing business in the interests of corporate transparency. This arises because companies are allegedly overstating profits by granting options that will in effect be claims against future profits and that are not fully reflected in the company's accounts. The International Accounting Standards Board is considering a standard that would require companies to estimate a value for stock options granted and to deduct this amount from current profits. Former Federal Reserve Chairman, Alan Greenspan, also argued strongly that companies should be required to expense stock options.

General recommendations for the development of risk capital

1. Create a social and economic climate conducive to the emergence of centres of high-technology investment. In addition to the general climate hospitable to entrepreneurship, protection of intellectual property and industry/government/university linkages in research are particularly important.
2. Take note of the need to develop a range of appropriate financing mechanisms at all points along the "financing ladder". The success at each stage of the ladder partly depends upon the perceived ability to progress to the next stage.

3. Create special public funds through which public sector entities can make equity investments in ISMEs in partnership with private investors.
4. Observe the principle of “risk sharing.” Use official funds only in partnership with businesses, universities or international organisations. After the preliminary stages of firm development, commit government funds only when private investors are willing to commit funds. Enable private investors to make project selections and to keep the upside.
5. Be careful about policies that provide access to low-cost funding but reduce rates of return for investors. Policies that diminish returns to investors will discourage private investors. Projects should be able to generate earnings in a competitive market.
6. Be sure that the tax system does not inadvertently place ISMEs at a disadvantage. Consider preferential tax treatment for investment in ISMEs.

Business angels: Key players in the risk capital market

A category of investors that plays a pivotal role in risk capital cycle consists of “business angels”, *i.e.* private individuals who invest their own money and experience in unquoted small and medium-sized businesses while utilising their networks of contacts and experience. Business angels are usually successful “cash-out” entrepreneurs who invest in emerging companies. They represent the first step in which the entrepreneur must deal with outside investors. Thus, they serve as a bridge between the earliest forms of informal investment, where it is nearly impossible to separate the act of providing capital from other aspects of developing a product and starting and managing a company, and the later phases of the life of a company where the separation of functions becomes sharper. Business angels are active in all categories of newer companies, both those which will peak as medium-sized enterprises with modest growth potential as well as those that will qualify for formal venture capital.

Business angels have different investment criteria than venture capitalists. They will tend to invest more on an “intuitive feeling” rather than based on the precise valuation of the term sheet of the company. This can be explained by the fact that angels invest in the very early stages of a company, when the entrepreneur may not have a well articulated business plan. Angels will tend to base their decision on highly intangible assets of the company, such as the experience of the entrepreneur or of the management team.

Business angels’ methods of operation also tend to be somewhat different from those of conventional venture capitalists. They tend to own common stock rather than preferred convertible stock, the preferred instrument of venture capitalists. Because they invest their own money, angels invest preferably in companies with which they can maintain close contacts; thus, they often operate in very narrow geographic areas. In the United States, it is sometimes said that business angels operate within a radius of 50 miles (80km) of their homes. They will also frequently ask for a seat on the board so as to closely oversee the work done by the team. Deals backed by business angels tend to be of smaller size and to occur at earlier stages in the life cycle of the firm. Unlike venture capitalists, that utilise funds provided by institutional investors, business angels basically invest their own money. Therefore, tax incentives that enable individuals to defer income taxes or to offset losses in early stage investment against other income may have a stronger effect on angel finance than on venture capital.

In the past, venture capital was often presented as the key element of entrepreneurial finance. However, as data has become increasingly available, the role played by business angels has gained greater recognition. Due to the informal nature of the market, data on business angels are much less available than on venture capital. Furthermore, effort to gather data on business angels began later than those on venture capital. According to data produced by the Center for Venture Research at the University of New Hampshire, business angels in the United States invested USD 22.5 billion in 48 000 deals in 2004 (average investment USD 225 000.) In the same period, venture capitalists invested USD 21 billion in 7 900 deals (average investment USD 7 million). According to one estimate in the United Kingdom, 20 000 to 40 000 business angels invest USD 0.8 billion to USD 1.8 billion equivalent per annum in 3 000 to 6 000 companies, making eight times as many investments in start-up companies as venture capital funds (Mason and Harrison, 2000).

Partly because of the difficulty in monitoring smaller projects and the large sums being invested by institutions such as pension funds, venture capitalists have been tending to concentrate on later-stage investments and on larger-scale projects. According to estimates of the University of New Hampshire, business angels in the United States will invest in deals as small as USD 100 000 while venture capitalists will not consider deals of less than USD 2 million. In Europe, it is now said that venture capitalists will not consider deals of less than EUR 2 to 3 million. The migration of venture capitalists to larger deals thus opens a market *niche* for business angels.

Business angels increasingly tend to have their own syndicates into which they bring other interested investors. This procedure enables business angels to invest in higher amounts than they would be able on their own, to spread the risk across several investments, and to have access to diverse kinds of expertise. The European Business Angel Network (EBAN) estimates that business angels are effective in investments in the range of EUR 25 000 to 250 000 in continental Europe, and up to EUR 400 000 in the United Kingdom (Munck and Saublens, 2005). Angel syndicates often pick up from there, investing up to EUR 2 million.

There are important synergies between business angels and the venture capital sector. Business angels provide support for the formal venture capital sector by seeking out and screening new projects, thereby raising the number of start-ups and increasing the deal flow for venture capital companies. Some studies have found that more than half of all venture capital funded high-tech projects in the United States had notable participation by business angels, with the proportion even higher in the smaller and newer firms (See Freear and Wetzel, 1989; and Fenn, Liang and Prowse, 1995). Some ISMEs remain with business angels throughout their entire life, while others eventually turn to venture capital finance.

Business angels networks

An important advance has been the emergence of well-developed channels to share information and to provide a means of introduction and contact between ISMEs and potential investors. Business angels networks (BANs) have the potential to mobilise substantial pools of informal venture capital that were formerly fragmented and invisible, to stimulate demand for equity finance that would otherwise have been latent, and to facilitate investments by creating communication channels. Contacts are maintained with other sources of deal flow such as universities, government investment promotion agencies, incubators, financial institutions, lawyers and consultants. The matching of

investors and entrepreneurs operates in different ways such as investment newsletters or magazines, investor forums and fairs. Many BANs utilise the Internet and databases intensively and some are nearly exclusively Internet-based.

BANs operate more often than not on the regional level, but sometimes have a national coverage. In some European countries they are represented by a national federation which mainly works towards raising awareness on the topic of angel investing and the potential economic role that angels can play in filling the equity gap. In addition to nationally and regionally organised BANs, there are increasingly sectoral BANs for biotech, Internet, media, etc., or for women investors. Some of these networks are sponsored by local governments. BANs may also be sponsored by financial institutions, stock exchanges or venture capital associations.

Official support of infrastructure for early stage risk capital

The early stage in the life of a company, where the entrepreneur first seeks outside financing is where many analysts and policy makers perceive a “market failure” or “financing gap” for new and risky enterprises and recommend official intervention to aid investment. Surveys of potential entrepreneurs often indicate that the lack of financing is perceived as a barrier to enterprise formation. However, many potential investors report a scarcity of “investment ready” proposals. To some degree, the difference in perceptions reflects the difference between entrepreneurs’ and financiers’ viewpoints. In many cases, entrepreneurs, especially those in technology-related fields, may have strong technical backgrounds and novel ideas but may lack the business acumen to turn ideas into marketable products. Entrepreneurs may have unrealistic expectations about the possibilities to retain control and/or the terms for sharing risk and rewards with outside investors.

Channels of communication for entrepreneurs and investors constitute a critical part of the infrastructure. Studies have shown that the lack of awareness of small firms concerning alternative financing is a factor depressing demand for venture capital. Plainly, this is an area where there may well be an important information gap that has to be bridged. On the one hand, potential investors have to gain access to information about potential new projects. On the other hand, entrepreneurs need to gain access to information about the availability of potential financing and about the requirements in terms of transparency and acceptable contracts that are required to induce investors to participate in undertakings.

National and local authorities can play a useful indirect role in encouraging private initiatives at the local level. These authorities can for example contribute to the development of incubators, which help provide infrastructure, on-site advice on the availability of skilled labour and training opportunities as well as information on venture capital suppliers. Similarly, they can lock in some of the benefits of existing geographical clusters that have spawned naturally. A key feature of such clusters is the informational networks that bring together business angels, venture capitalists, professional firms including lawyers and accountants, entrepreneurs and university business schools. This close proximity encourages the spread of ideas, allowing ISMEs to benefit from the expertise of the other companies and financial institutions around them.

According to some experts, it is very difficult for these facilities to generate enough revenue to cover their infrastructure costs. Thus, it has been suggested that support for the appropriate infrastructure is one of the most effective ways in which public policy can be

used to promote informal investments (Mason and Harrison, 1999). Experience suggests that facilities such as incubators and BANs are a very cost-effective way in which national or sub-national governments, sometimes in partnership with either non-profit organisations and agencies or private sector organisations, can remove many of the financial and managerial problems encountered by new ISMEs. However, care must be taken to ensure that such services are not set up as an isolated attempt to address financing needs of ISMEs; instead, they should form part of a broad package of support measures including support of science parks and incubators, and possibly official equity participation.

Recommendations: business angels/early stage finance

1. Increase awareness among entrepreneurs of the range of financing options available through official programmes, private investors and banks.
2. Co-ordinate the activities of those supplying funds with the activities of science parks and business incubators as well those supplying consulting and other support programmes.
3. Facilitate the development of business angel networks, mainly by providing infrastructure support.

Venture capital

Venture capital provides a link between the ISME and institutional sources of capital. By providing opportunities for certain investors to deploy their capital to innovative and high growth sectors of the economy, venture capital can offer diversification to offset the risks in other asset classes. Venture capital also holds the promise of higher absolute returns over time in order to compensate for the lesser liquidity and transparency of venture capital investments.

The venture capital firm, which is typically organised as a limited partnership, brings together venture capitalists (the general partners), who are active specialists in the various stages of the venture capital cycle, with the investors (the limited partners.) The partnership has a definite life after which it terminates. The partnership will normally have a number of investments at various points of the investment cycle and revenues from exits will normally be reinvested in new ventures.

The ISME typically proceeds through several stages, from “seed” before production has begun through “early stage” and through one or more “expansion” or “development” rounds. The venture capitalist may participate at any stage of that process, although as noted above, the trend is increasingly to invest later in the life cycle of the company. At the end of the process, the venture capitalists aim to realise a return on the investment through “exit”. The exit may take the form of a trade sale to a company that wishes to acquire the company as part of a strategic business or through an IPO. The normal expectation is that the investment will be liquidated within a defined time horizon.

Methods of operation in venture capital

As one enters the realm of venture capital, the separation of functions becomes more distinct, with different parties providing entrepreneurship, technical skills, business skills and capital. As the separation of functions increases, it becomes necessary to define

precisely the role that each party plays, to write more explicit contracts, to devise monitoring mechanisms and to mitigate agency costs.

The venture capitalists screen potential deals, raise funds, structure appropriate financing and monitor performance. Newer firms, especially those in high-tech industries, tend to have problems with risk and information asymmetries. While their lack of adequate cash flow makes it necessary to rely on equity financing, lack of profitability and short track records make them unsuitable for public listing. Moreover, the information that is normally disclosed by established firms is not readily available. The worth of the firm is closely linked to the potential for untried ideas to be applied in practical economic situations. Most of the assets of the firm are intangible, lessening their value as collateral and reducing possibilities for debt finance. The form of investment favoured by venture capitalists is convertible preferred equity, which can be converted into common stock at later stages of the cycle and used as an exit vehicle.

The models of ownership, investment and governance of established companies are not fully applicable in venture capital.⁵ The separation of functions among investors, boards and management that characterise “blue chip” companies is much less distinct. Venture capitalists diversify their holdings, but only to the point it does not diminish their capacity for active monitoring. The venture capitalists usually have seats on the board of directors of their portfolio companies and are expected to be active in guiding their development. Venture capitalists often find individuals with strong management backgrounds to take leading roles in the company. Conventional institutional investors in larger companies rely on professional research, which in turn relies on publicly disclosed information. Access to inside information and the capacity to assess information under conditions of high uncertainty are attributes of venture capital.

Whether their background is in finance or in technological areas, venture capitalists are expected to have detailed knowledge of the sectors where they operate. They are in ongoing communication with the technical innovation and the marketing plans of other innovators in similar fields. Because of the need to maintain close ties to innovative entrepreneurs and the supporting research, venture capital firms and the entrepreneurs they finance tend to be concentrated in certain geographic areas near universities and other research facilities. However, the geographic horizon of the venture capitalist is normally wider than that of the business angel.

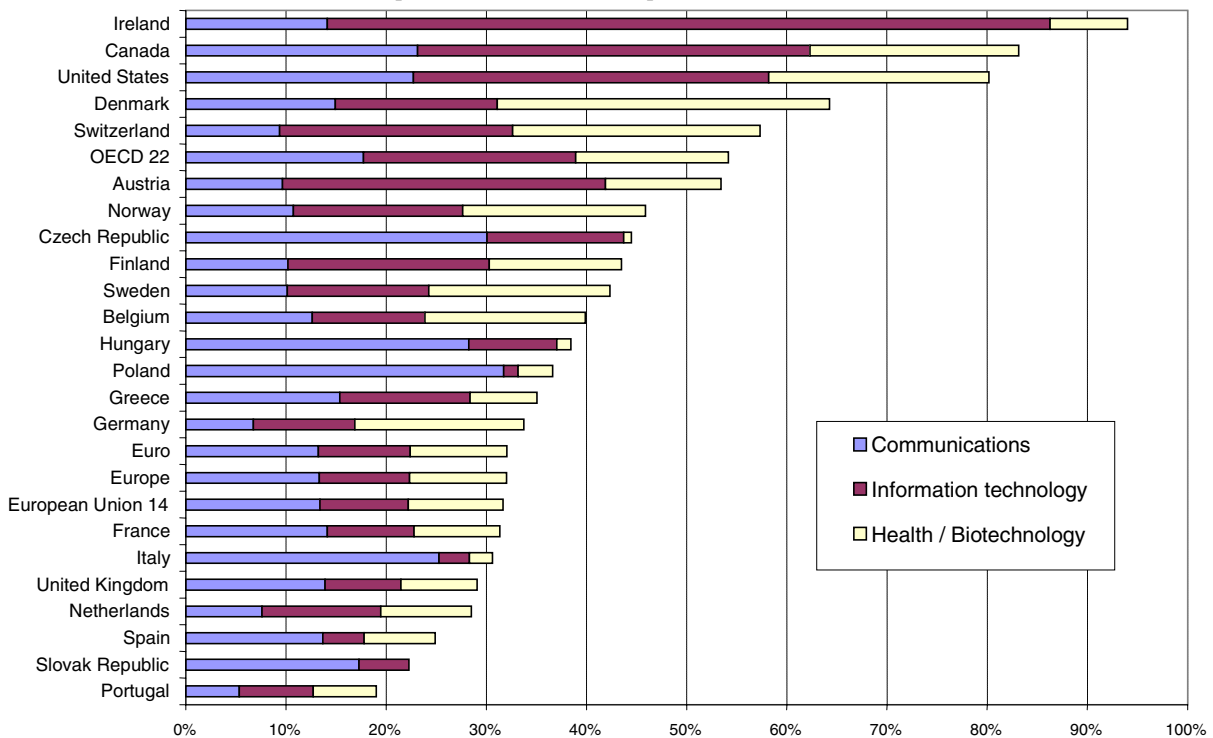
A large deal flow is important in venture capital. A key reality is that among all business plans submitted to venture capitalists, the great majority will be rejected. Of those accepted, a substantial number will fail, most will give acceptable results and a very few will produce extraordinary rates of return. The procedures developed have to operate in an environment where most deals will not be profitable, but with a reasonable likelihood of finding a few deals that produce extraordinary returns.

In order to compensate for high risk and for the prolonged period of illiquidity, the proposed project must have potential to attain very high revenue growth. The venture capitalist therefore needs particular skill and methods in identifying and nurturing companies with the potential to achieve high rates of return. Frequently such opportunities are found in the advanced technology sectors. However, firms such as Federal Express or Starbucks Coffee Company did not operate in high-technology sectors, but nevertheless, produced business models with potential for high rates of growth and thus were credible venture capital candidates.

An indication for the innovative potential generated by venture capital is the share of high-technology sectors in total venture capital (See Figure 3.2). Half of the OECD venture capital flows into high-technology firms, but there are large disparities among countries. This share is highest in Ireland, Canada, the United States and Denmark, which all score above the OECD average.

Figure 3.2. Share of high-technology sectors in total venture capital

As a percent of total venture capital investment, 2000-03



Note: Total venture capital investment consists of early and later stage venture capital as well as, except for the United States, buyouts. European Union 14 comprises data from Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Euro, Denmark, Sweden, and the United Kingdom. OECD 22 comprises data from European Union 14 countries as well as from Norway, Switzerland, the Czech Republic, Hungary, Poland, the Slovak Republic, Canada and the United States.

Source: OECD, 2003.

It is also notable that this share is relatively high in some smaller countries, which otherwise have low overall levels of venture capital to GDP, such as some of the East European countries. In the latter, this high ratio comes mainly from the strong position of the communications sub-sector, which attracts more venture capital than the information technology (IT), the health and the biotechnology sectors. In most other countries, such as in Ireland and Canada, the IT sector plays a major role. Health and biotechnology firms account for over 25% of total venture capital investment in Denmark, and have a relatively considerable share also in Norway, Switzerland, Sweden and Germany.

A series of conflicts may arise between the venture capitalist and the founding entrepreneurs of the company. The entrepreneurs will often perceive the venture capitalist as seeking to obtain an excessive part of the control and of the financial rewards of the company. In fact in the majority of cases, venture capitalists replace the founder of the

firm with professional outside managers. Likewise, the general partners and the limited partners often have conflicts over valuation and compensation.

One reflection of these conflicts is the structure of remuneration that reflects both the relative bargaining position of each of the parties and is also structured to align the interests of the entrepreneur with those of the venture capitalists and the investors. Contracts are written and covenants devised to balance the interests of the entrepreneurs and the other parties in the transaction.

The venture capitalists usually receive annual management fees, typically about 2.5% of the original contribution. In addition, the managers are typically compensated in the form of “carried interest”, usually up to 20% of the profits of the fund. Often the managers do not receive carried interest until the investors have been repaid the full amount of their investment in the fund.

Suppliers of Funds for Venture Capital

Institutional Investors

One of the successes of venture capital has been to bring together the entrepreneurs with innovative business proposals and investors, who have no particular expertise in investing in ISMEs but who are willing to invest part of their portfolios in companies with higher-than-average risk, provided there are good prospects of achieving better-than-average returns. The venture capital industry provides such investors with a systematised method to execute such an investment strategy.

In the United States, the main sources of venture capital funds in the early years of the industry were high net worth individuals, foundations, universities and charitable endowments. These categories of investors developed the practice of investing a certain portion of their assets in venture capital. A major breakthrough occurred in 1979 when the U.S. Labor Department, which regulates private pensions, authorised pension funds to invest in this sector. During the 1980s, pension funds became the largest single source of financing. American private pension funds are subject to “prudent man” regulatory regimes rather than to portfolio allocation guidelines, leaving them relatively free to decide upon their own portfolio composition. By the late 1990s, it was fairly common for pension funds to allocate certain shares of their portfolios to “alternative asset classes,” including venture capital.

The United States’ experience suggests that a sizeable pool of institutional savings with a flexible regulatory regime is a significant stimulus to the development of venture capital. Conversely, any country that lacks a pool of institutional savings or where institutional savings are rigidly regulated is likely to face difficulties in funding a domestic venture capital industry.

While the lack of funded pensions may be a partial explanation for the low investments in venture capital in many countries, even some countries with well-developed funded pension schemes have had only a limited success with venture capital. For example, pension funds are important sources of institutional savings in the Netherlands and Switzerland, but the pension fund sector is not a major investor in venture capital in these countries. Many analysts attribute the shortfall to rigid regulation. Few countries with funded pension schemes appear to have outright prohibitions on venture capital investment. Several countries have limits on all equity investments or in

unlisted equity, but these limits were much higher than the extremely small amounts currently invested in venture capital.⁶

In the United Kingdom, there are high institutional savings, including funded defined benefit (DB) pensions, a rather liberal regulatory regime and a decade-long effort to promote the growth of the venture capital sector. In fact, British institutions have invested heavily in private equity, but investments are concentrated in buyouts and to a lesser degree in later stage venture capital. While investment in venture capital is higher than the European average, it is well below that of the United States, Canada or Korea. As a result, a governmental commission (the Myners Commission) was organised in recent years partly to investigate why British institutions invested relatively little in this sector in general, and especially in early stage investments. One explanation could be the low rate of return on early stage investments in Europe.

Insurance companies tend to be more risk averse than pension funds, and in many countries, limitations on investments in equity are strict, with limits on investments in unlisted equity even stricter. Insurance companies are also subject to a Minimum Funding Requirement (MFR). In general, this sector is much less significant than the pension fund sector as an investor in venture capital. Several countries, such as France and Germany where institutional savings are high but a large share is held in insurance, have comparatively small venture capital sectors.

Rather than build a portfolio of individual companies, many institutions gain exposure to the venture capital market through the “fund of funds” structure in which investments are made in a special intermediary. The intermediary in turn screens possible deals and builds a portfolio of venture capital investments. Specialised intermediaries can identify opportunities and help build portfolios for investors. While this structure assists in diversification and in selection, it has the inconvenience of adding another layer of fees.

One group that is largely absent from the venture capital sector are collective investment schemes (CIS), such as mutual funds or unit trusts. The rules of open-ended CIS require diversification of portfolios, valuations based on market prices and the possibility for investors to redeem units at frequent intervals. Generally, CIS also require diversification that, to some degree, conflicts with the need for venture capital funds to concentrate their portfolios. The EU UCITS Directive, for example, prohibits investments designed to gain managerial control over companies. In the United States, a few closed-end funds have achieved limited success in the late 1990s, but most have lost liquidity since 2000.

A number of European countries (United Kingdom, France, Spain, and Germany) have devised special tax-advantaged, closed-end collective investment instruments designed to encourage broad equity investment in innovative companies. In order to qualify for favourable tax treatment, these funds are required to invest specific portions of their assets in the shares of unquoted companies. In some cases, partial exemption is granted for shares listed on “growth exchanges”. In Canada, labour-sponsored funds supported by tax incentives for investments in new companies have been sizeable investors.

To the degree that lack of institutional savings in the appropriate form is a barrier to investment in venture capital, it is not possible to recommend that institutional savings should be developed in order to stimulate the growth of the venture capital industry. The development of institutional savings has to be justified on its own terms, *i.e.* funded

pension systems are needed to provide retirement income, insurance products are needed to manage risks and collective investments are desirable to enable the public to invest in high-growth companies. Additionally, any change in the prudential regime governing institutional investors has to be justified on the grounds that it results in enhanced protection for final beneficiaries.

Financial institutions

Banks and investment banks provide a certain amount of funding. In most cases, the parent financial institution will form a venture capital subsidiary. In this case, the funds for investment come from the parent, rather than from passive investors. In addition to the income generated from venture capital, this technique enables these institutions to remain in contact with new emerging technology-based companies to produce new commercial banking or investment banking activity. Thus, relationships will develop with venture capital companies that will be candidates for exit via IPOs or mergers and acquisitions (M&A).

Corporate venturing

The corporate sector is a significant supplier of funds. Many non-financial companies have created venture capital subsidiaries that seek projects, usually in sectors related to the business of the parent company. In addition to acting as a source of income, the venture capital subsidiary is seen as a means for the company to gain exposure to new deals in its field of competence. Many corporations are rethinking the way in which they manage the innovation process, shifting from an internal, centralised R&D process to alternatives, including joint ventures, acquisitions, and university-based collaboration. By filtering proposals in the market, the company can gain access to related research that would have synergies with research done in-house. At the same time, the corporate venturing route may be an effective means of gaining access to research with a high probability of failure, thus avoiding the expense of doing such research inside the company. Interest in corporate venturing programmes was heightened by the fact that venture capital groups were increasingly willing to consider working with corporate groups. In the United States, the corporate sector gained significance as a source of funds in the late 1990s.

Some of the companies identified through corporate venturing subsidiaries may prove to be acquisition targets for the parent company. Some large technology-based companies, Intel and Cisco systems, for example, have tended to pursue an acquisition-oriented strategy as their approach to the incorporation of new technology. In a few cases, traditional independent venture capital firms organised joint ventures with corporate venturing companies.

Official equity participation in venture capital

As noted above, many governments have programmes to invest in ISMEs. While this issue was discussed under the heading of business angels/early-stage investment, a considerable share of such investments take place in projects that are funded by venture capital. In principle, such official investments are made at earlier stages with the public sector reducing its stakes or exiting as the investment progresses into later stages.

Foreign venture capital firms

The venture capital interest is becoming increasingly global in scope. Many venture capital investments involve groups of venture capital firms from more than one country. Foreign venture capital is particularly important in countries where domestic investors such as business angels or institutional investors are not well established. Thus, in Southern Europe as well as in transition economies and most emerging markets, most venture capital firms are foreign affiliated. Many venture capital funds are dedicated to a single country or they may be divided among investments in an entire region. Such funds may be domiciled under the laws of the host country or in an offshore location. In cases where the domestic legal and regulatory framework is not hospitable to venture capital investment or where it is untried, foreign firms often choose to be domiciled in an offshore centre.

While foreign venture capital can clearly make a great contribution in launching an indigenous industry, it is plainly in the interest of countries with undeveloped risk capital sectors to develop an indigenous sector. Foreign firms tend to concentrate on later stage investments or in restructuring of existing firms. Furthermore, international firms are sensitive to international trends in the opinions of investors and, hence, may be more vulnerable to shifts in investor sentiment. Domestic investors who tend to have a home bias will provide a useful addition to foreign venture capital by anchoring venture capital incitement in the domestic markets.

Ownership of venture capital firms

There are several possible ownership structures for venture capital companies. The majority of companies are independent. The venture capitalists are individuals with no connection to other companies who contribute their labour and expertise, while the passive investors contribute funds. In addition, there are “captive” firms, typically owned by a financial institution such as a bank, investment bank or insurance company that provide the funds invested. In “semi-captive” companies, the funds are provided both by the parent and independent investors. In addition to returns on its venture capital investment, the parent company may also be interested in obtaining additional business, (e.g. commercial banking or investment banking) from companies identified through the venture capital deal flow. A number of corporate venture funds have developed this option, in addition to investment revenue, which may bring benefits to the parent company in terms of exposure to new technologies to complement the company’s in-house research. The companies identified from the deal flow of the venture capital company make also it possible to identify likely acquisition targets.

In the case of both captive venture capital companies controlled by financial institutions and corporate venture capital, it is important to structure the company so that it has enough independence to act as a profit maximising venture capital institution, but retains enough ties to the parent so that benefits can be extracted from the relationship.

In the United States, about 80% of venture capital funds are independent. In Europe, investments by independent investors accounted for more than 60% of total private equity investments in 2000. Captive and semi-captive private equity investors invested about 32% of all private equity, while the public sector covers a small share of total investments. The differences among European countries are striking. Sweden, Switzerland, and the United Kingdom have the highest share of independent venture

capital companies, while the French market is dominated by captive and semi-captive companies, which are often subsidiaries of banks.

The legal structures of venture capital funds

In order for venture capital to flourish, appropriate legal and organisational forms must be found to allow the venture capital process to proceed. The legal vehicle chosen should not be subjected to the full procedures established for public securities offerings and should be flexible enough for the general and limited partners to agree on compensation schemes and to write flexible contracts so as to minimise conflicts of interest. Similarly, the structure should not expose the venture capitalists or the investors to double taxation.

Vehicles used for venture capital investment must be efficient from the point of view of taxation. Venture capitalists support the principle of tax transparency; *i.e.* no tax should be collected at the level of the fund and income should be taxed as if it were received directly by the investor. Under some structures, the earnings of the fund could be taxed as a capital gain at the time it is transmitted to the fund and, subsequently, taxed as a dividend when distributed to investors. While the specific provisions of some tax laws encourage some venture capital funds to establish operations in other jurisdictions, use of a particular country as a site for incorporation may create a permanent business establishment in the country and, thus, expose the company to additional tax liabilities. In addition, certain types of vehicles may be subject to investment restrictions that may preclude some venture capital investments.

After experiments with other forms over the years, the limited investment partnership has proven to be an effective vehicle for venture capital in the United States and it is used widely in the United Kingdom. Japan introduced limited investment partnerships in 1997, and these have been the principal vehicle for venture capital. The private investment partnership, so long as it contains fewer than 100 partners, can raise capital efficiently with fewer regulatory burdens than other instruments. Thus, this form is also used for other private equity operations (*e.g.* buyouts) as well as hedge funds. Usually, the partnership has a specific life (generally 10-12 years) after which the fund is liquidated. The general partners are venture capitalists, who are active specialists in the various stages of the venture capital cycle, while the passive investors (high net worth individuals or institutional investors) are limited partners.

Other forms of organisation are used in other countries consistent with their own legal systems. Unfortunately, some countries do not have any legal forms that are well adapted to the needs of the venture capital sector. In some cases, the lack of suitable domestic structures and the uncertainties concerning the legal treatment of firms that might be established under domestic law encourage firms to establish in offshore jurisdictions.

In European countries, where a multiplicity of forms is found, funds generally contain both investors and projects in more than one country. In such cases, the investment vehicle may be treated differently by the tax or regulatory authorities of various countries. Thus, foreign investors participating in the fund may be exposed to more taxes than those levied upon investors from the home country of the funds particularly if the vehicle was designed to conform to domestic laws. As a result, many in the venture capital industry argue that the lack of appropriate legal structures and the conflicting treatment of structures among European countries constitute impediments to the growth of the sector.

Some commentators have advocated a single structure recognised throughout Europe to address problems of tax transparency and investment restrictions.

Private equity

Closely related to venture capital is the concept of “private equity”, which means equity investment, not listed on a public exchange. In addition, a private equity transaction typically takes place through a special legal structure (such as private equity partnerships as found in the United States and United Kingdom or similar vehicles in other countries). The private equity firm is usually organised as a limited partnership in which the general partner contributes skill while the limited partner makes a financial investment, usually as part of a diversified portfolio. These investors aim at holding the company for a limited time with the aim of eventually realising profit through an “exit”.

Venture capital is a special form of private equity. Other forms of private equity comprise various forms of operations in which a mature company, capital, and managerial practices are changed. The company may be broken into component parts or consolidated with another entity. Both venture capital and other forms of private equity operate as extremely close monitors of management and seek to transform the company in order to realise value. The main difference is that venture capital deals with new companies that are taken through several stages to an ultimate exit, while private equity deals with a broader range of companies, frequently mature companies with prospects for restructuring. The private equity transition is less likely to go through several stages of financing and much more likely to use debt than venture capital. (In fact, many private equity transactions result in increased leverage.)

Private equity and venture capital in emerging markets and transition economies

While a clear majority of venture capital operations occur in the high-income OECD countries, significant activity is also occurring in emerging markets. Arguably, the need for private equity is even more urgent in emerging markets than in more mature economies. In mature economies with strong financial markets, listed companies are often highly responsive to capital markets, which are driven by institutional investors and are under strong pressure to observe rigorous standards of disclosure. Emerging markets are more often characterised by companies with concentrated ownership, lower levels of transparency, and capital markets that have less capacity to impose discipline on the corporate sector (see Box 3.2). Thus, private equity is often an effective means of affecting corporate transformation.

India and China have become major participants in the venture capital industry in recent years. Despite their low levels of per capita income, both of these countries had significant parts of their economies that had critical linkages to the world process of research, technical innovation and diffusion (see also Katsuno, 2005). Both countries have large communities of highly trained scientific technicians, many of whom have acquired experience in foreign centres of research and marketing, and whom maintain

Box 3.2. Private equity in transition and emerging economies

Issues:

- Generational transition
- Expansion or modernisation
- Rescue/turnaround
- ISME finance

Techniques:

- Bridge financing: financing made available to a company in the period of transition from being privately owned to being publicly quoted (usually debt finance).
- Management buyout: enables current management (possibly with investors) to acquire existing business.
- Management buy-in: enables outside manager or group of managers to acquire existing business.
- Secondary purchase/replacement capital: purchase of existing shares in a company from another private equity organisation or from another shareholder(s).
- Venture capital financing of ISMEs.

Exits mainly by trade sales

close links to those centres. Foreign investors wish to maintain a foothold in these markets in the belief that they have a greater potential for growth. These countries have large populations and substantial gains in real income are expected in coming years. As a result, these markets are viewed highly favourably and a significant volume of venture capital investment is taking place. In 2004, investment by private equity firms in India was estimated at USD 2 billion, 100% more than the year before – a surge partly due to several funds making excellent returns on investment in India (Ernst & Young, 2005a). In China, venture capital investment has increased from USD 418 million in 2002 to USD 1.27 billion in 2004, and four out of the top 10 global technology IPOs in 2004 were conducted by Chinese companies (Ernst & Young, 2005b).

It should be noted that these two countries are making rapid strides in attracting venture capital investment despite significant problems in the market infrastructure in areas such as bureaucratic rigidity, uncertain legal environments, and spotty records concerning the equitable treatment of foreign investors and the protection of intellectual property (World Bank, 2005). Moreover, lack of appropriate exit vehicles is an obstacle facing the fast growing markets in Asia. For example, the recent decline in venture capital investment in China, by 8.1% in the first half of 2005 compared to the first quarter of 2004 and by 13.8% compared to the second half of 2004, is seen, as at least in part, attributable to regulatory and structural barriers, in particular to recent regulations affecting the ability of Chinese companies to list on overseas exchanges (Ernst & Young, 2005b).

While these two countries are attracting considerable interest due to their close linkages to the international venture capital industry, other emerging markets are making noteworthy strides. For example, the Brazilian venture capital/private equity industry, which began in the early 1990s, has shown considerable dynamism in the past few years. It has developed the capability to restore existing companies and to provide financing to ISMEs. The industry may now be poised for take-off (see Box 3.3).

Box 3.3. The Brazilian venture capital industry

Brazil has one of the world's highest rates of entrepreneurial activity (as measured by the proportion of entrepreneurs to the total population); although much of this activity is necessity-driven, Brazil shows some prospects for business opportunities. The country has *i)* a large population; *ii)* a vigorous economy; *iii)* a high degree of scientific and technological developments; and *iv)* recent institutional development to foster a favourable business climate.

Between 1993 and 2003, the number of new enterprises formed each year has varied between 445 000 and 533 000. While most are traditional "lifestyle SMEs", the remaining 20% (nearly 100 000) of new enterprises may present potential for seed and early-stage investment.

An even greater potential for seed and early-stage investment resides in the business-incubator programme which is rapidly increasing in Brazil. The number of active incubators went up from 135 in 2000 to a total of 283 in 2004. A recent assessment of the programme shows that more than five thousand SMEs have benefited from this type of support. Most incubated companies try to bring innovation to industry sectors such as software and information technology (25%), electronics (14%), internet (11%), biotechnology (5%), telecommunication (4%) and product design (4%). Thus, about two thirds of Brazilian venture capital (VC) investments in sectors with substantial technology inputs. These sectors are the similar to the ones private equity (PE)/VC industry consider for investment and are quite different from the sectors that dominate the Brazilian stock exchange listings.

As Brazil has a potential demand for early-stage investment in innovative SMEs, it also has a growing PE/VC industry that could supposedly select and finance the most promising of the business projects. PE/VC is especially design to deal with the risks associated with long-term investments in innovative SMEs. To mitigate these risks, PE/VC managers rely on active screening and monitoring practices.

Evolution of Brazil's PE/VC industry

The initial push toward equity participation in private companies was actually given by the Brazilian Government during the 1970s. In the beginning of the 1980s, the government started its operations in PE/VC. However, the first companies to benefit were mainly big corporations in traditional strategic industries. After that period, the focus has changed to high-tech SMEs and, by 1994, the government started to phase-out, leaving the role of manager to the private sector. This move, which received support from multilateral institutions and private pension funds, was fundamental in the formation of PE/VC vehicles focused on high-tech SMEs.

During the last ten years the Brazilian PE/VC industry has significantly evolved. By the end of 2004, there were 71 PE/VC organisations with a total of USD 5.58 billion under management. Though these figures are small by comparison with the United States, only a handful of countries in the world have larger VC sector. The portfolio was comprised of more than 300 companies of all sizes in 26 different industry sectors. Over the first ten-year cycle, managers have shown the ability to deal adequately with the screening, monitoring and exiting processes.

For a long time there were doubts about the feasibility of exiting PE/VC investments in emerging markets generally. These doubts posed a treat to the development of a PE/VC in Brazil. Nevertheless, 2004 and 2005 were paradigmatic years as venture-backed IPOs were responsible for more than half the total amount raised by all IPOs. This has caught the attention of both the business community and the media.

Along with IPOs, trade sales contributed to a doubling of exits from 2003 to 2004. One third of exits were performed through one of those routes, which are usually the most profitable of all. Even more important is to recognise that these IPOs were performed in the stock market segments requiring the highest levels of governance standards.

After a complete cycle of PE/VC, a pool of qualified PE/VC professionals has emerged. It counts 498 professionals with 233 partners that have long-term commitment to the activity they perform. While PE/VC is an attractive source of financing, it is only available to the 1% of the most promising business projects. In 2004, the industry received more than 3 600 investment proposals and invested in around 35 of them. During the process, only 840 were actually examined by the PE/VC professionals. Only 17% reached the due diligence. Only one in four that went through the due diligence received an investment in the same year.

[continued]

The relatively low success rate at the due diligence stage may indicate the restrictive criteria imposed by PE/VC managers on the companies under scrutiny, but also a lack of understanding about the role that venture capital play in value creation for the company they finance. It is expected that a PE/VC entrepreneurial culture will emerge as success stories reach the general public and entrepreneurs receive adequate information and training.

The small number of investments in PE/VC, especially in seed capital and start-ups, illustrates the potential for growth of this market in Brazil. The share of venture capital to GDP lags behind that of more advanced markets, but this situation is expected to change in the future, pushed by the regained momentum of the industry in 2004.

Future developments

Brazil's institutional environment is also improving to become more supportive of early-stage entrepreneurial activity. The main improvements on the demand side are: *i)* new corporate law; *ii)* arbitrage recognition, and; *iii)* new bankruptcy law (which has opened new avenues for corporate recovery as a substitute for liquidation). Other important improvements made on the supply side were: *i)* liberalisation of some pension funds portfolio composition regulations; and *ii)* changes in the PE/VC regulation with attention to governance. All this had the effect of augmenting pension funds awareness to this asset class. The belief in the industry's development is clear: 90% of managers intend to continue in business.

Besides that, there are suggestions for improving minority shareholder protection, such as admission of different classes of shares, with special voting rights, a plural voting system, and the express recognition in the Brazilian Civil Code of rights typically found in PE/VC investment, such as tag along, drag along, registration rights and liquidation rights.

There is also much room to improve the tax burdens on PE/VC activity. While tax planning has been used to reduce effective taxation on PE/VC capital gains, this technique has proved itself very costly and cumbersome to PE/VC managers that should be spending their time in their core activities. The industry needs no tax subsidy. On the contrary, little adjustments in tax policy, such as equal treatment to foreign investment in all types of long-term mutual funds, should promote a dramatic increase in the availability of PE/VC.

Thus, the government has an important role in the PE/VC industry development, which is supported by international experience. Its role is central, but non-directive and non-interventionist, placing the private initiative as a fundamental player in selecting investments, adding value to portfolio companies, and performing the whole activity in a profitable way that provides investors better results. And, naturally, the promotion of a stable environment for contract enforcement, reasonable taxation and maintaining stable macroeconomic policies is essential for the development of SMEs, given their long-term and high-risk nature

In many emerging markets, such as Asia, Latin America and the Middle East, there are large numbers of companies that are family-owned and controlled with limited transparency and that generally do not operate under international norms of corporate governance and investor protection. While some companies may be profitable, they are often ill-equipped to address issues such as expansion of capital, strategic repositioning or succession. Additionally, the owners of such companies may find it difficult to realise value from their investments. Nevertheless, they may be potentially attractive acquisition targets for foreign companies seeking to gain access to the local market. Such companies may aim at increasing capital, improving competitiveness and/or public listing. The private equity market is often effective in acting as a bridge from traditional proprietary companies to modern listed companies.

During the 1990s, the venture capital and private equity industries experienced significant growth in the transition economies of Central and Eastern Europe. These economies frequently had made large investments in scientific research, but linking scientific research and commercial application were extremely tenuous. In addition, as part of the effort at systemic transition, a very large number of companies were

privatised, often in a disorganised manner. For those companies that were sold to foreign strategic investors, the new owners assumed responsibility for aligning domestic practices in governance, management and profitability with global norms. In many cases, however, ownership was transferred to workers or incumbent management, or through mass privatisation programmes—often in firms that were overstaffed and over-indebted, and that used obsolete technology and lacked expertise and capital to upgrade techniques or produce for global markets. Venture capital and private equity, which typically provide both risk capital as well as close guidance in restructuring, often was able to offer relevant solutions to these problems. At this point most private equity in transition economies is concentrated in buyouts and restructuring with very little early stage investment occurring.

In general, the institutional capital that is found in the major OECD countries is absent in these markets as is the necessary skills in private equity. As a result, many of the venture capital and private equity firms active in non-OECD regions are foreign affiliated (see also Criscuolo, 2005).

Recommendations concerning venture capital

1. Assess existing tax and regulatory system to ensure that legal forms for venture capital investment are adequate to support venture capital investment. Consult with the venture capital industry about necessary changes.
2. Facilitate access to institutional capital. Review national policies to determine whether some forms of institutional savings should be increased. Adapt regulations on institutional investors to permit investment in venture capital, if investment is compatible with prudent investment management and fiduciary duty to beneficiaries.
3. Develop special collective schemes to facilitate retail investment in venture capital.
4. Consider tax benefits for investment in venture capital.
5. Facilitate investment by foreign venture capital firms.

Exit

As discussed earlier in the chapter, there is a strong correlation between the ability to exit, either through IPOs or through sales to strategic investors, and the ability to generate business at all points in the risk capital cycle. The stage of exit is where the company has passed through all of the developmental phases of its life cycle. At that point, it leaves the realm of private equity and emerges as a public company.

Exit can take several forms:

Trade sales are outright, phased or partial sales of the company to a strategic investor, *i.e.* an industrial or commercial company that seeks managerial control over the company. The target company, which in a typical example may have new technology-based products, is acquired in order to incorporate these product lines as part of the acquiring company's business line. An example would be when a retailer acquires a company developing Internet-based sales techniques or when a pharmaceuticals company acquires a biotechnology company having attractive product lines.

Private placement is the sale of the company to another investor who is interested in maintaining control over the company without offering the shares to the public. The sale could occur from a venture capital company specialised in early stage investments to one specialised in later stage investment or with a wider range of financing options (mezzanine finance, convertible bonds, etc.)

Share repurchase by the entrepreneurs. The terms under which the shares can be repurchased are usually stipulated in the financing agreement. This form of exit is considered to be the sign of a less successful undertaking.

Public offering is a technique where the investor exits by selling part of their shares in a public offering. This is seen as the most successful form of venture capital exit. Although trade sales are the predominant mode of exit in all markets, it is agreed that a vigorous initial public offering (IPO) market is beneficial for the venture capital market for several reasons: 1) to serve as a basis of valuations for companies; 2) to facilitate M&A operations; 3) to create mechanisms for the exercise of stock options and otherwise allow insiders to exit; and 4) to set standards of excellence to which all companies can aspire. Usually, the venture capitalist firm does not exit completely at the time of the IPO. Most IPOs contain restrictions that limit the amount of shares that can be sold by insiders, including the entrepreneurs and the venture capital firm. In a typical case, insiders must wait several months to one year before their shares can be sold.

The main avenue of exit at all times and places is through “trade sales”, *i.e.* sales to strategic investors. While many countries have focused efforts to promote ISME finance on the IPO route for exit. In fact, since most exits occur via trade sales, this is an area where governments could usefully review their policies toward foreign direct investment (FDI) or toward mergers and acquisitions. Since cross-border acquisitions are an integral part of the progression of ISMEs toward the stage of mature public companies, any measures that hamper the operations of the market in corporate control can impede the development of the ISME sector.

“Growth” equity exchanges

While trade sales are much larger than IPOs in terms of volume in almost all instances and places, IPOs are important in establishing valuation both for listed and unlisted companies. IPOs are also important in setting standards to which newer companies can aspire, since many highly successful companies are publicly listed. Many countries were impressed by the experience of NASDAQ in the United States in spurring the development of ISMEs and have sought to emulate the experience of NASDAQ.

Public listing is seen as the goal of most entrepreneurs and investors in the venture capital cycle. In fact, venture-backed companies have usually not chosen to list on the traditional exchanges, but on exchanges that specialise in growth companies. ISMEs can be seen as a subset of “growth companies”, which can be defined as having better-than-average growth prospects and trading at high multiples, price/earning (P/E) ratios tend to be high, and dividend yields low. The high valuation of the company is justified by superior prospects for growth.⁷

At several times during the past 20 years, several countries have identified the absence of equity finance for “growth companies” as an obstacle to the development of their risk capital markets. Certain exchanges have specialised in listing and trading growth companies. The classic “growth exchange” is NASDAQ of the United States.⁸

Many world class companies, especially technology related companies, which would be eligible for listing on the NYSE (Microsoft, Intel, MCI, Apple Computer etc) have instead chosen to remain on NASDAQ as their primary place of listing.

Each of these marketplaces has somewhat different rules but each wish to attract young and innovative companies. Companies listed on the growth exchanges often have shorter track records than established companies. Additionally, these exchanges permitted relatively large blocks of shares to remain under the control of insiders. Growth exchanges typically had requirements of only 20-25% of shares in free float. It is expected that increasingly large shares of the company's equity will be held by outsiders as the company expands.

Since trading volume in the shares of newer companies is likely to be less than those of established companies, these exchanges require listed companies to have sponsors, advisers or market makers who have some commitment to maintaining markets in the shares of the companies and to assuring that the company continues the information flow to investors. Concerning disclosure, all exchanges required annual reports, prospectuses and business plans. Beyond simply creating exchanges for growth companies, other prerequisites must be fulfilled in order for the market to develop sufficient liquidity. Most fundamentally, a community of investors must be found that is willing to hold and trade the shares of newer and less well-known companies. The brokerage community must conduct regular research on listed companies in order to continue the flow of information to investors. The financial press must continue to provide coverage and analysis. If this process does not continue, investors will lose interest and shares will no longer be traded actively.

In Europe, there have been several attempts to establish exchanges geared to the special needs of growth companies. A first wave of reforms in the 1980s was mostly unsuccessful. After the mid-1990s, several exchanges were launched in Europe, many of which were designed to be special growth markets as opposed to traditional second boards. The first in the second wave of European "growth equity exchanges" was the Alternative Investment Market (AIM) in London which opened in June 1995. AIM listed traditional small capitalisation companies as well as "growth" companies. Some European exchanges have a traditional "second board" as well as a "growth company" board.⁹ By the late 1990s, significant strides had apparently been made in constructing a second generation of stock exchanges geared to fast growing dynamic companies, with some 20 growth markets operating in Europe at the end of 2001. Each growth market was open to listings by foreign companies, but most remained domestic. Some international alliances were formed.¹⁰

A number of platforms for trading growth equities across Europe were established. EASDAQ (the European Securities Dealers Automated Quote System) closely modelled on NASDAQ was set up in Belgium to operate throughout Europe. It was the only exchange where most listed companies were not domestic. In addition NASDAQ Europe, an international platform directly owned by NASDAQ designed to trade throughout Europe and with links to NASDAQ's global trading platform, was established. In 2001, NASDAQ Europe acquired EASDAQ.

During the pre-2000 internet boom, investors rushed to build ITC and biotech exposure and "growth stock exchanges" soared. IPOs took place at inflated prices as many companies with highly tentative business plans and little or no history of earnings were floated prematurely. With the collapse of the IT bubble after 2000, with most European growth exchanges ceasing their operations or becoming illiquid. EASDAQ, re-

branded as NASDAQ Europe, also met with disappointing results and was closed down in June 2003. Most of these exchanges were obliged to suspend operations after the bursting of the bubble (see Figure 3.3).

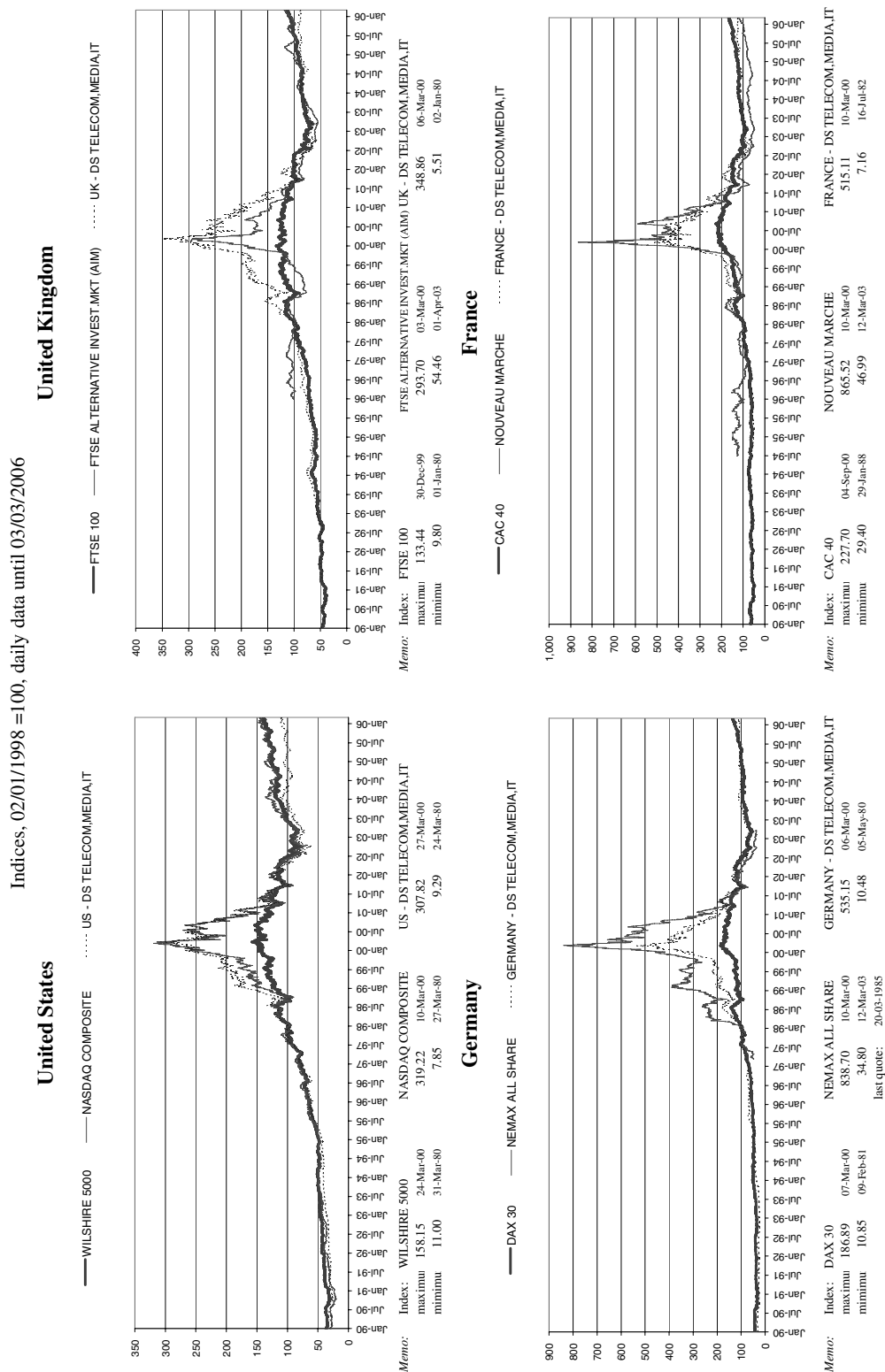
In Asia, several “growth” exchanges are in operation, such as KOSDAQ in Korea, NASDAQ Japan and “Mothers” in Japan and the GEM (Growth Equity Market) in Hong Kong, China. Of these KOSDAQ has achieved the highest degree of success. Indeed, Korea is one country where IPOs predominate as the form of exit.

After stagnating for several years following the bursting of the tech bubble in 2000, the IPO market has been staging a recovery, both in the US and in Europe (see Figure 3.4 and Figure 3.5). With signs of recovery in the IPO sector now appearing, efforts to build a pan-European trading platform for growth companies appear likely to intensify. In 2004, Euronext launched Alternext, a market geared to ISMEs. In October 2005, the London Stock Exchange announced that AIM will be expanded from its current position, which is essentially a UK-based small company market with only a few overseas listings, to one with the capability to attract business from the entire European continent. In order to achieve this, market makers and advisers will be authorised to operate from all European countries. Also, in October, Deutsche Börse decided to resurrect a market segment for smaller companies – two and a half years after it discontinued its Neuer Markt. These, and possibly other platforms, are likely to compete to emerge as the preeminent exchange in Europe for smaller and emerging companies. There is some hypothesising that EASDAQ, which has now been acquired by a small group of private investors, may be revived.

While many European venture capitalists believe that a European platform for growth equities is essential, many foreign companies have decided to list on NASDAQ. Thus, Israeli companies launching IPOs have used NASDAQ as their market of choice. Similarly, ten Chinese tech companies decided in 2005 to launch IPOs on NASDAQ. While larger Chinese companies which have mostly listed on the Hong Kong Stock Exchange, technology-based companies from China bypassed the GEM in favour of NASDAQ.

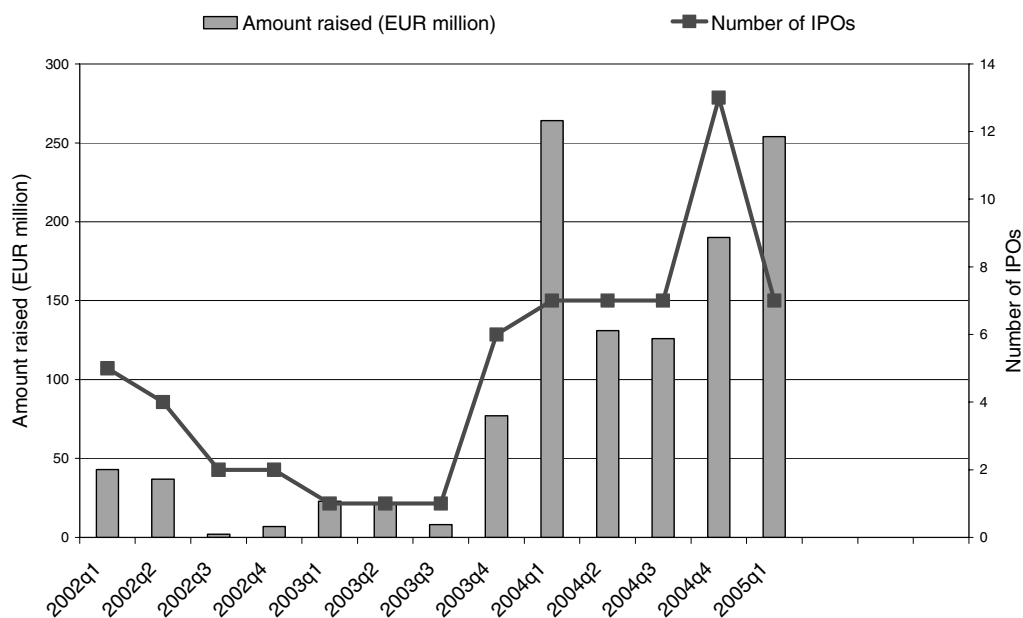
Looking ahead, it is uncertain exactly how the global configuration of growth exchanges will evolve. NASDAQ, which has withstood every shock of the last 35 years, will almost certainly prosper as an American exchange and possibly as a global platform for emerging companies. It remains to be seen whether other exchanges in Europe or elsewhere will be able to emerge as a serious rival for listing growth companies. One factor that could affect the competitive balance among exchanges is the Sarbanes-Oxley Law, which was enacted in the United States following the corporate governance abuses uncovered in companies such as Enron and WorldCom. The law increased corporate reporting requirements and made key executives and directors legally accountable for misdeeds undertaken by the management of listed corporations. Many foreign observers see the Sarbanes Oxley Law as posing burdensome reporting requirements on foreign companies, most of which operate under different legal accounting and audit regimes than in the United States. Additionally, the liability of foreign corporate officers under American Law is another issue posed by Sarbanes Oxley. Some observers report that foreign companies are weighing the requirements of the law when considering listing on American exchanges. It is unclear whether this legislation will have any long term impact on NASDAQ’s position as a global marketplace for exits by ISMEs.

Figure 3.3. Comparative performance of growth stock exchanges
Equity price indices of main markets, growth exchanges and technology sectors



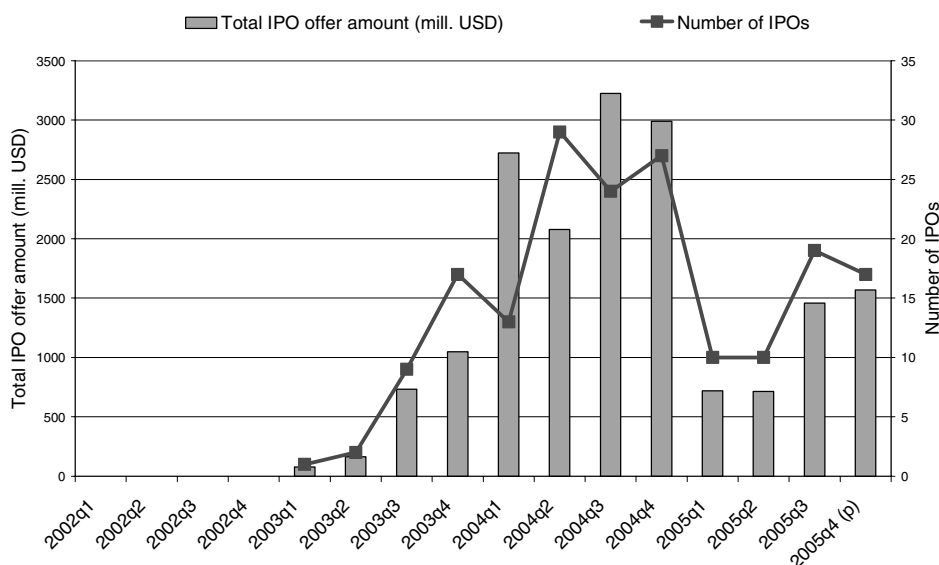
Source: Thomson Financial Data Stream.

Figure 3.4. Initial public offerings (IPOs) in Europe
Amount raised through IPOs by European venture-backed companies



Source: Thomson Financial, VentureSource/Ernst & Young.

Figure 3.5. Initial public offerings (IPOs) in the United States
Venture-backed IPOs companies



Source: Thomson Venture Economics & National Venture Capital Association.

Most publicly led efforts to foster the emergence of “growth exchanges” have not been fruitful. In the long run, the array of markets that ISMEs use as exit vehicles will

ultimately reflect initiatives taken by market participants themselves. It is quite possible that in some emerging markets capital market regulations are too rigid to permit the emergence of “growth” exchanges. In these cases, review of the existing regulatory framework is in order. However, in most advanced economies the authorities have already adapted regulations sufficient to enable ISMEs to achieve listing. The problem is to develop markets that meet the needs of private companies and potential investors in newly listed growth companies. It is comparatively easy to establish new exchanges when accelerated business is expected in an expansionary phase of the capital market cycle. Indeed, it is now widely acknowledged that during the pre-2000 IT bubble many companies were allowed to launch IPOs that were clearly not ready for public listing

The real test of growth markets is whether they remain active through cycles. Even when markets experience major corrections, a community of investors must remain with intermediaries willing to provide liquidity while research and press coverage of companies continue. At the same time, it is worth observing that with technological progress, innovation and free capital flows, trading systems are in continuing competition for order flow and listings. Thus, attempts by the private sector to develop new trading platforms are likely to continue. The main role of the public sector is to avoid regulatory rigidity that hampers the functioning of the private markets.

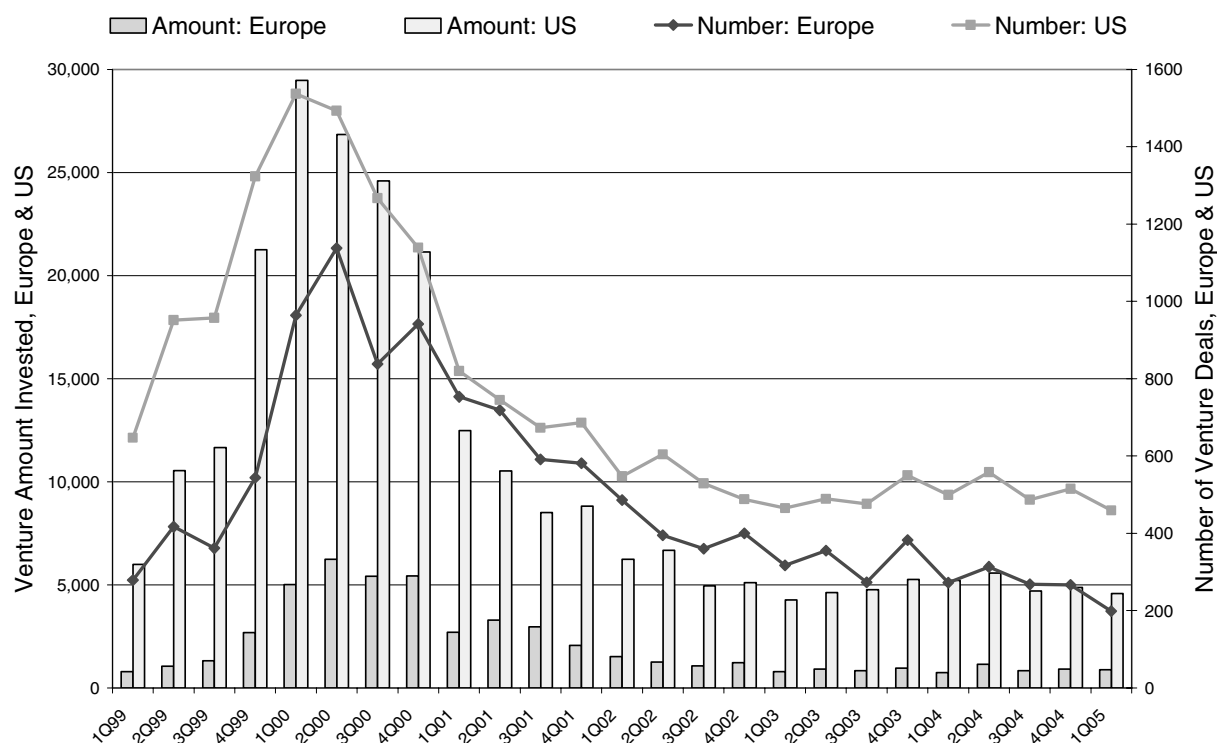
Recommendations concerning exit mechanisms

1. Review regulations concerning M&As to determine whether obstacles are present that inhibit trade sales.
2. Review FDI regulations to determine whether policies discourage foreign acquisition of domestic companies.
3. Review rules for listing on main board of exchanges and on special board for small companies to determine whether rules are flexible enough to permit listing by growth companies.
4. Facilitate listing by domestic ISMEs on overseas markets.

Evolution of venture capital in long-term perspective

It is frequently observed that the venture capital business is highly cyclical. During the expansionary phase of the cycle, funds flow into venture capital firms, which then pursue deals aggressively, pushing valuations upwards. In the contraction phase, equity prices fall, no new money enters the sector and valuations decline. As a result, it is important for investors to avoid the euphoria that occurs in the expansionary phases of the cycle and the subsequent losses. Many experienced venture capitalists argue that to remain viable players firms must “invest through the cycle”. Similarly, venture capital firms without sufficient depth often have difficulty in finding sustainable and profitable deals. Thus, profitable deals tend to be concentrated in a small number of experienced firms. The behaviour of the venture capital industry since the 2000 bubble can be seen in Figure 3.6.

Figure 3.6. Venture capital: United States vs. Europe

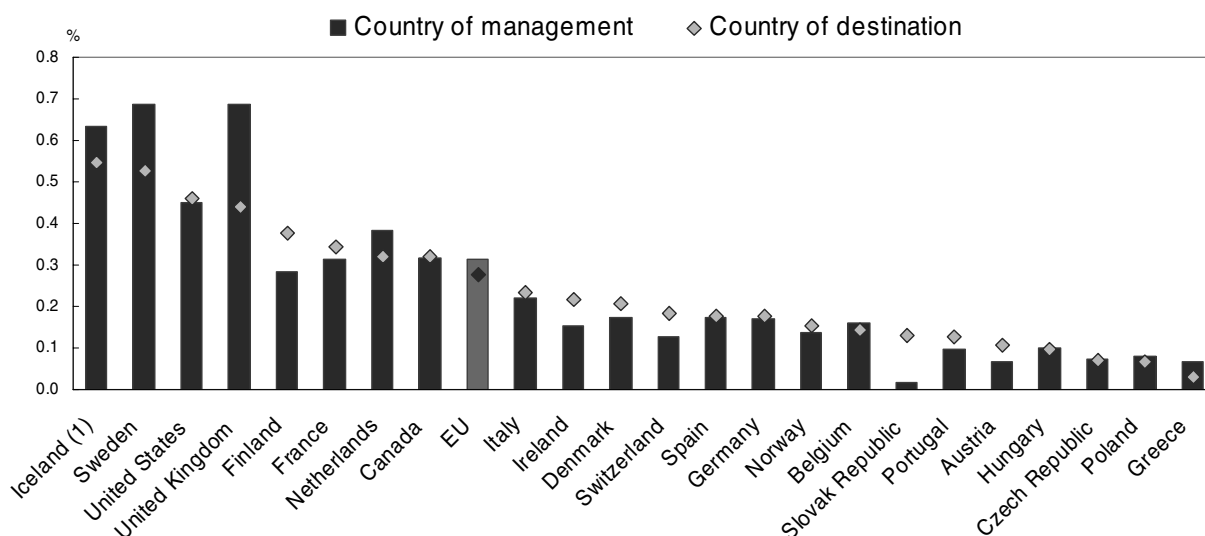


Source: Thomson Financial, VentureSource / Ernst & Young.

Using the United States as an example, where the industry has been of significant scale, the industry has gone through two distinct expansionary phases since the early 1970s. After 1980, the industry was characterised by surging volumes of capital raised and a wave of IPOs stemming from investments in the late 1970s. Funds flowing into the industry rose tenfold between 1980 and presented a cyclical peak of USD 6 billion in 1984. After the mid-1980s, commitments to the venture capital industry declined steadily through 1990. Inflows in excess of the industry's absorptive capacity and the enlarged presence of inexperienced venture capitalists led to a decline in returns and a slowing of commitments by final investors.

A second, even larger expansion occurred in the late 1990s, in a large part stimulated by booming conditions in the real economy in which expenditures on information and communication technology (ICT) soared after 1995 (Figure 3.7.). Rising productivity, often attributed to spending on technology-intensive products, resulted in employment gains and receding inflation. According to some analysts, the gains attributed to the "new economy" produced permanently higher rates of corporate profitability, thus justifying historically high equity valuations. Thus, the late 1990s were characterised by rising productivity, related to accelerated investment in technology. By this time, the venture capital industry in Europe had gained some traction.

Figure 3.7. Venture capital investment by country of management and destination
In percent of GDP, 2000-03



Note: (1) 2000-2002. Total venture capital investment includes investments in early stages, expansion, buyout and others. For the United States and Canada, country of destination equals domestic investment plus European capital invested in the respective country.

Source: OECD, based on data from EVCA (Europe); NVCA (United States); CVCA (Canada); Asian Venture Capital Journal (The 2000 Guide to Venture Capital in Asia).

Concurrent with the expansion of the venture capital industry in the late 1990s, many analysts began to postulate a link between technology, innovative companies, finance and economic performance. Growth rates in the United States and Europe accelerated and gains were scored in combating employment while inflation remained tame. Many analysts concluded that the new economy had led to a permanent improvement in the inflation/unemployment trade-off. Moreover, the productivity gains attributed to the “new economy” were believed to have produced permanently higher rates of corporate profitability and, thus, justified historically high valuations for equities (OECD, 2001b). The venture capital sector benefited more than proportionately from this bullish “new economy” sentiment. Venture capital funds raised in the United States rose nine-fold to USD 93 billion between 1995 and 2000. In Europe, funds raised climbed fivefold to USD 20 billion equivalent between 1998 and 2000. As investors rushed to build ITC and biotech exposure, “growth stock exchanges” boomed. These exchanges later suffered significantly from the collapse of the IT bubble after 2000, with most European growth exchanges ceasing their operations or becoming illiquid (see Table 3.3).

As the foregoing discussion has shown, the venture capital sector has gone through some rather sharp cycles over the past two decades. Despite these wide swings, some enduring traits of the market can be identified. Most notably, differences in levels of private equity and venture capital in comparison to GDP remain very large between the United States and other OECD countries. This trend appears to have become accentuated in the post-2000 recovery.

Table 3.3. Private equity net returns to investors
From Inception to December 31, 2004

Stage	No.	Pooled	Upper quartile	Median	DPI	RVPI	TVPI
Early/Seed VC	545	20	16.2	2.7	1.29	0.54	1.83
Seed VC	65	10.2	13.3	4.0	1.08	0.39	1.48
Balanced VC	426	13.6	15.6	5.4	1.03	0.50	1.53
Later Stage VC	182	13.8	15.2	5.4	1.04	0.44	1.49
Total US venture	1153	15.9	15.9	4.4	1.12	0.50	1.63
Development VC	173	8.2	7.4	0.0	0.74	0.68	1.42
Early VC	252	0.2	4.2	-3.1	0.40	0.60	1.01
Balanced VC	146	7.9	10.7	0.0	0.66	0.59	1.26
Total European venture	571	6.0	6.7	-0.4	0.60	0.62	1.21
Small Buyouts	186	25.0	18.6	7.9	1.32	0.40	1.73
Medium Buyouts	105	16.4	16.1	6.8	1.07	0.42	1.49
Large Buyouts	82	17.4	18.8	7.0	1.01	0.59	1.59
Mega Buyouts	101	8.6	14.7	5.8	0.64	0.66	1.30
Total US buyouts	474	13.1	17.8	7.0	0.81	0.60	1.41
Small Buyouts	218	11.2	15.8	7.6	0.92	0.51	1.42
Medium Buyouts	36	17.7	22.2	9.0	1.16	0.54	1.70
Large Buyouts	28	20.4	18.6	7.0	1.09	0.55	1.64
Mega Buyouts	25	6.4	12.8	1.8	0.38	0.81	1.19
Total European Buyouts	307	12.3	16.5	6.9	0.70	0.67	1.37

Note: DPI = Distribution to Paid-In; RVPI = Residual Value to Paid-In; TVPI = Total Value to Paid-In.

Source: Thomson Financial.

There are persisting differences between the United States and Europe in venture capital, in particular the relatively lower rates of return in the risk capital industry in Europe. Rates on early stage investment are extremely low in Europe. It is sometimes observed that the number of early stage deals in Europe is actually higher than in the US, but that the average size of deals is very low, suggesting that European venture capital has difficulty in achieving adequate size and in raising follow-on *tranches* once good projects are identified.

It is also important to look at international flows of venture capital, U.S. firms increasingly invest in Europe and Asia, and there is significant cross-border investment within Europe and Asia. In Iceland, Sweden and the United Kingdom, domestic firms manage more venture capital than they receive from international flows. In contrast, international flows of venture capital to Finland, Ireland, Switzerland, and the Slovak Republic (country of destination) exceed by far the investments managed by domestic venture capital firms (country of management).

Notes

1. At the same time, since the data on venture capital is available for longer periods and on a relatively comparable basis across countries, these data series will sometimes be used to support broad assertions about ISME finance.
2. This set of criteria was developed by Ernst & Young in the context of making recommendations as to how China could emerge as a “technology hotbed.” By pooling the experience of a group of experts in venture capital with experience in Silicon Valley, Israel and Chinese Taipei, some agreement was reached on what constitutes an attractive environment for ISME finance. While the report was aimed directly at China, the characteristics identified are applicable globally. (Ernst & Young, September 2005).
3. The *Association Française des Investisseurs en Capital* (AFIC), the British Venture Capital Association (BVCA) and the European Private Equity and Venture Capital Association (EVCA), with input and endorsement from other 27 associations (including regional and national associations in Europe, Russia, Africa, Australia and Hong Kong, China).
4. These countries include Australia, Belgium, Canada, Finland, Germany, Ireland, Japan, Korea, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States. For more details see Thompson and Choi (2002).
5. However, there are alternative sets of regulation that are applied to firms that are owned by venture capitalists. See ECVA (2005b).
6. One explanation that has been advanced for this shortfall in pension fund investing was the Minimum Funding Requirement (MFR). Most OECD countries have funding rules in place for defined benefit (DB) plans, which may affect the asset allocation by encouraging regular matching of pension assets and liabilities. Since DB liabilities are dominated by benefits paid to current retirees, which are fixed in value (or indexed to the price level), there is a bias for investment in fixed-income instruments or in publicly listed equity.
7. In fact, equity analysts categorise any company having these attributes as a growth company, wherever it is listed. “Growth” investment strategies usually involve portfolios that invest heavily in such companies. This strategy is often contrasted to “value” investing strategies where the investor seeks companies with low valuations supported by tangible assets, assured revenues and established market shares in sectors where demand is predictable.
8. This exchange, which has been operating since 1971, was conceived as an alternative to the existing exchanges at the time, the New York Stock Exchange (NYSE), the American Stock Exchange (ASE) and the regional exchanges. (The U.S. equities market has since undergone fundamental structural changes.) NASDAQ was one of the first exchanges to trade in a fully automated system without a trading floor. The NASDAQ model has been adopted in other countries, mainly those dealing in traditional equities. NASDAQ has specialised in growth companies and has a large share of technology-intensive companies in its listings. Each NASDAQ stock has had a limited number of “market makers” who are committed to quote, bid and offer prices on shares in which they have agreed to act as market makers. By the year 2000, NASDAQ had listed 4 400 companies, against 2 800 companies listed as the NYSE, although the average capitalisation was less.

9. In France, for example, the “Second Marché” functioned as a listing place for traditional small companies, while the “Nouveau Marché” was set up as the “growth market.”
10. Five of the growth markets in Europe (Germany, France, Italy, Belgium and the Netherlands) created a loose alliance known as the EuroNM, which was designed to merge into a pan European platform for growth stocks. Each exchange remained under national control and rules varied somewhat among countries, but the objective was to achieve fuller integration with time. However, the underlying national systems differed significantly, and EuroNM was disbanded at the end of 2000. The Nordic Growth Market existed as a joint exchange alongside national growth markets in each Nordic country.

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Annex A

SMEs Access to Finance in Developing and Emerging Economies: Evidence from Africa

The problem of SME access to financing cannot be separated from considerations about the environment in which these firms operate (see box A.1.). The institutional characteristics of the financial sector and the various factors affecting the volatility of the business environment (information asymmetries, poorly defined property rights, lack of contract enforcement or protection of creditors' rights, high crime rates, etc.) impact on the ability of firms to access credit directly and indirectly by raising the SMEs perceived risk.

Box A.1. The SME Sector in Africa

Private sector development varies greatly throughout Africa. SMEs are flourishing in South Africa, Mauritius and North Africa, thanks to fairly modern financial systems and clear government policies in favour of private enterprise. Elsewhere the rise of a small business class has been hindered by political instability or strong dependence on a few raw materials. Between these two extremes, Senegal and Kenya have created conditions for private sector growth, but are still held back by an inadequate financial system. In Nigeria, SMEs (about 95% of formal manufacturing activity) are key to the economy, but lack of security, corruption and poor infrastructure prevent them from becoming motors of growth.

Africa's private sector consists of mostly informal micro enterprises operating alongside large firms. Most companies are small because of policy-induced obstacles and a poor business environment that discourages investment, entering the formal economy and more broadly private sector activity. Between these large and small firms, SMEs are very scarce and constitute a "missing middle". Even in South Africa, with its robust private sector, micro and very small enterprises provided more than 55% of all jobs and 22% of GDP in 2003, while large firms accounted for 64% of GDP.

SMEs are weak in Africa because of small local markets, undeveloped regional integration and very difficult business conditions, which include cumbersome official procedures, weak legal enforcement and protection of property and creditor rights, inadequate financial systems and unattractive tax regimes. Poor transport and communication infrastructure contribute to limited access to input and output markets domestically, regionally and internationally. Many firms stay small and informal, and use simple technology. Their smallness also protects them from legal proceedings (since they have few assets to seize in bankruptcy) and allow them to survive and adjust to uncertain business environments. Large firms have the means to overcome legal and financial obstacles since they have more negotiating power and often good contacts to help them get preferential treatment. They depend less on the local economy because they have access to foreign finance, technology and markets, especially if they are subsidiaries of bigger companies. They can also make up more easily for inadequate public services.

Source: Kauffmann (2005).

Africa's SMEs have little access to finance, which thus hampers their emergence and eventual growth.¹ Their main sources of capital are their retained earnings and informal savings and loan associations (*tontines*), which are unpredictable, not very secure, and have little scope for risk sharing because of their regional or sectoral focus. Access to formal finance is poor because of the high risk of default among SMEs and due to inadequate financial facilities. Small business in Africa can rarely meet the conditions set by financial institutions, which see SMEs as too risky because of lack of information about their ability to repay loans and the limited guarantees they can offer. The financial system in most of Africa is under-developed and so provides few financial instruments. Capital markets are in their infancy, shareholding is rare and no long-term financing is available for SMEs. Non-bank financial intermediaries, such as microcredit institutions, could be a big help in lending money to the smallest SMEs but they do not have the resources to follow up their customers when they expand.

Acknowledging this financing gap, both governments and donors have embarked on a series of SME support programmes. However, in many cases, results have been disappointing. Programmes have too often focused on creating new enterprises and creating new financial institutions, rather than helping existing ones grow to their efficient size; and they have not been accompanied by efforts by the authorities to improve the business climate.

Drawing on this experience a new consensus has emerged among governments, private sector participants and the donor community on the need to help existing enterprises grow to their efficient size through a multi-pronged strategy, which tackles the direct and indirect sources of such low access. Firstly, such a strategy should work towards reducing the volatility of the business environment. Secondly, it should aim at strengthening the capacity of SMEs to deal with financial institutions and, more broadly, reduce their perceived risk. Thirdly, the strategy should work on the supply side of financing. This step, of course, calls for deepening and modernising the financial sector, while making it more SME-friendly. The improvement of credit supply can also be achieved through strengthened commercial links between SMEs and their clients and suppliers. Policy makers, especially if informed through meaningful public-private dialogue, clearly have an important role to play in improving each component of this strategy, as briefly discussed below.

Improving business conditions

Information asymmetries, a key determinant of any decision to extend a loan and the conditions attached, could be considerably reduced by adopting clear accounting standards, setting up independent, competent, and reputable accounting firms and creating more credit registries that supply data on the solvency of firms. Proper contract enforcement and the protection of creditor rights are also key determinants for easing access to credit. An impartial legal system that can help settle contract disputes, commercial law reform, and drafting and clarifying land titles, as well as effective bankruptcy procedures are vital for the growth of the business sector. A country's tax laws can either coax small businesses into the formal sector of the economy or keep them out of it. Governments can create incentives for small entrepreneurs to enter the formal economy by simplifying taxes for small firms. In that perspective, some countries – in the Union Economique et Monétaire Ouest Africaine (UEMOA), for instance – are developing lump-sum taxes as incentives for SMEs to register. Governments should also

make sure that they pay SMEs promptly, since public contracts are vital to the financial security of these firms.

Most African countries have embarked on reforms of their business environment. Nevertheless, concerns about poorly defined property rights and land entitlements, low contract enforcement and high rates of credit delinquency are widespread. National authorities are increasingly aware of the potentially adverse impacts of their choice of regulatory framework. For instance, changes in capital regulation and tougher bank supervision can lead to a reduction in the supply of credit. Policies regarding the entry of financial institutions (restrictions on foreign entry, for instance) or their market shares also affect the lending infrastructure. In South Africa, for instance, a task force has been established with the aim of identifying regulatory obstacles to SME access to finance.

Helping SMEs meet the requirements for formal financing

Apart from the need to boost SMEs' capacities to deal with the documentation requirements to access financing, some financial instruments can help provide missing information or reduce the risk stemming from some SMEs' lack of transparency. Franchising, which is very popular in Southern and East Africa with the encouragement of South Africa, allows the use of a brand name or know-how that reduces the risk of failure. Warehouse-receipt financing (examples can be found in South Africa, Kenya and Zambia) guarantees loans with agricultural stocks (see Box A.2.). Other financial instruments, such as leasing and factoring, can reduce risk effectively for credit institutions but are still little used in Africa.

Box A.2. The warehouse receipts financing programme in Zambia

This programme was implemented by a donor in 2002 in collaboration with the Zambian Agricultural Commodity Agency (ZACA). The farmers who benefit from a loan deliver the commodities to be stored in a bonded and insured warehouse. The credit company uses the warehouse receipts as guarantees, advancing to the borrower a specified percentage of the value of the commodity stored. Beneficiaries have accessed more than USD 700 000 in bank encashable warehouse receipts against their commodities stored in ZACA certified warehouses. To encourage and support local banks, the donor-funded Development Credit Authority provides a 40% guarantee to the loan.

Credit associations that reduce risk by sharing it are more common. They help financial institutions choose to whom to lend, by guaranteeing the technical viability of projects, and sometimes providing guarantees. But growth of these bodies is limited by the lack of organisation among SMEs in Africa and by their focus on certain sectors and geographical areas. Governments and donors have thus preferred the creation of guarantee funds to ensure repayment in case of default. In several countries, especially in Central Africa, this has not worked well since provision of a guarantee has meant less rigorous choice of investment projects and a lower rate of debt recovery. Elsewhere, notably in Mozambique (Box A.3), borrowers and financial institutions have worked together to maintain a good rate of recovery and to reduce interest rates.

Box A.3. Setting the proper incentives for financial institutions, public support institutions and borrowers to collaborate in Mozambique

Mozambique has accumulated some experience in the area of guarantee funds, notably in developing mechanisms of punctual monitoring (carried out by independent auditing companies) that have proved crucial in ensuring high recovery rates. The authorities, supported by the donor community, are now refining the scheme taking into account the behaviour of some banks, which have tended to take advantage of the guarantee funds and the risk-sharing agreement without reducing the interest rate or the percentage of collateral required from their clients. In response to this concern and in order to increase competition among local financial institutions, Mozambique has developed new procedures, notably by making risk sharing available only to the local financial institutions that offer the best credit conditions to the final beneficiaries of the guarantee fund.

Making the financial system more accessible to SMEs

Most African financial systems are fragmented and characterised by limited efficiency. The “missing middle” in the pattern of firm size is matched by one in the range of financing available. Lack of funding for SMEs has partly been compensated by micro-credit institutions, whose growth is due to the flexible loans they offer small businesses. In Angola, Novobanco provides loans free of bank charges, without a minimum deposit and with informal guarantees (property assets and a guarantor), as well as permanent contact with loan managers. Though adapted to local needs, micro-credit institutions remain fragile and modest-sized. As well as lacking trained staff, micro-credit institutions face limited expansion opportunities because of their limited funds. Their mainly short-term finance means they cannot easily turn the savings they collect into medium or long-term loans. They are also up against the cost of refinancing through the formal banking sector and have no access to refinancing either through the central bank or through venture capital. Microcredit institutions could be put on a firmer financial footing by developing and adapting long-term savings products that exist elsewhere, such as life insurance and home-saving plans, and encouraging the setting up of specialised refinance banks such as Mali’s “solidarity bank” (*Banque malienne de solidarité*, see Box A.4.), or working more closely with the formal banking sector (Benin’s SME support organisation PAPME and the local Bank of Africa). Some countries (such as Kenya) have dealt with the lack of funding by supporting growth of smaller commercial banks or (in Ghana) of rural banks so as to bring traditional banks and SMEs closer geographically and business-wise. South Africa passed two laws in early 2005 to expand the banking system to include savings and loan institutions (second-tier banks) and co-operative banks (third-tier banks), while easing banking regulations so the newcomers could still be flexible in providing loans. In many countries, commercial banks are also setting up their own micro-credit services.

Box A.4. Banque Malienne de Solidarité (BMS)

The BMS was established in 2002 in order to support SMEs through direct credit facilities but also indirectly through refinancing Microfinance Institutions (MFIs). BMS operations are closely interwoven with Malian micro-finance institutions' activities in several respects. While the government is the main shareholder of the BMS, 76% of its capital is actually held by MFIs and four of the nine members of its board are representatives of the major Malian micro-finance networks. As a result of this "built in" proximity between the BMS and Malian MFIs, BMS is involved in MFI refinancing. It contributes with MFIs to the co-financing of target groups of clients and it provides commercial banks with financial guarantees for their refinancing of MFIs. The partnership between MFIs and the BMS has so far been efficient and successful: MFIs are involved in more than one third of BMS' activities and no repayment failure has been recorded so far on a credit facility made available to MFIs. At the end of 2003, 29 loans had been made to MFIs for an overall amount of 1.8 billion CFA francs.

Removing the obstacles to SME access to finance requires that commercial banks, micro-credit institutions, community groups and business development services (BDS) work closely together. Pushing for agreements between financial bodies and BDS suppliers will help make up for lack of capacity and reduce costs by a more efficient division of labour. The BDS supplier makes the initial choice of projects on a purely technical basis and the credit institution looks at financial viability. Making loans to intermediaries (NGOs and SME federations) in charge of allotting funds to members can also help cut administration costs. Solidarity between banks, especially setting up inter-bank financing to pool money (as in Nigeria – see Box A.5.) to be invested in SMEs, reduces as well the extra risk of lending to SMEs. Working with banks boosts the financial viability of micro-credit institutions and can also help informal financial bodies to move towards the formal sector.

Box A.5. The Nigerian Small and Medium Industries Equity Investment Scheme (SMIEIS)

The SMIEIS was established in 2001 by the Central Bank of Nigeria with the voluntary support and efforts of the Bankers' Committee. The Scheme requires that all banks in Nigeria set aside 10% of their profit before tax annually for equity investments in SMEs. Equity investments may be in the form of fresh injection and/or conversion of existing debts owed to participating banks into equities. This arrangement eliminates the burden of interest and other charges associated with normal bank lending. The Scheme employs an innovative mechanism to ensure effectiveness through a programme in which the banks identify, guide and nurture enterprises that are financed under the scheme.

While the equity market had generally accounted for most of the small, shallow capital market financing available in developing countries, bond finance has only recently increased its share in total finance for both sovereign and corporate borrowers in these countries, thanks to the development of domestic bond markets. Moreover, and particularly in the case of corporations, the development of bond markets is seen as an alternative to bank lending for raising capital. However, in almost all African countries, the limited depth and inefficiency of capital markets, combined with low savings and a high perceived country risk, have contributed keeping interest rates and the cost of capital at high levels, curbing important sources of finance for smaller and medium companies.² Even in Southern Africa, the region with the most advanced and sophisticated capital markets in the subcontinent, capital is disproportionately expensive further reducing financing opportunities for local firms, including SMEs (Grandes and Pinaud, 2005).³ Measures to strengthen the financial market and to reduce the high risk premium can be

mutually reinforcing and can reduce the cost of capital. These measures include the relaxation of regulations constraining capital outflows, the further development of the domestic bond market enhancing its liquidity, and the improvement of the taxation regime to stimulate domestic savings. It is worth noting that the development of the South African capital market would have major consequences for the private sector in the region, given the relevance of this economy in the region and peg to the rand in the Southern Africa Common Monetary Area, especially if it was accompanied by a concurrent strengthening of local financial systems in neighbouring countries.

Expanding the supply of finance through the non-financial private sector

Financial institutions are not the only source of money for SMEs. Apart from remittances by nationals working abroad, the interdependence between SMEs and larger firms is a major potential source of finance, as shown in Asia and Latin America. Big firms can do a lot to help SMEs get finance more easily by transferring resources (money and factors of production) and guaranteeing SME solvency with financial institutions. Links with major companies can also help SMEs get export credits, which are especially important in countries with weak institutions since commercial partners are better informed than other creditors (especially financial institutions) about the ability of their customers to repay debts. Within the agricultural sector interlocking arrangements, such as out-grower schemes, can also become an important source of credit where the buyers provide inputs and services on credit to farmers and guarantee to buy their output. Successful experiences are observed in Kenya (tea sector) and in Zambia (cotton sector). These schemes need to surmount well-known agency and co-ordination problems and seem to work better in commodity chains characterised by high downstream investments, which provide an incentive for buyers/processors to assist suppliers, and by a limited number of buyers, which facilitates horizontal co-ordination and reduces the scope for side-selling/side-buying. Subcontracting is still uncommon in Africa, but has grown rapidly in South Africa since 1998, though there is increasing scepticism as it may confine SMEs to low-skill informal activities. Clusters of SMEs, which are very active in Asia, enable member firms to seek finance together, provide collective guarantees or even set up their own financial body. Trust as well as the threat of “expulsion” from the cluster prevent deviation and ensure repayment, allowing the network to overcome shortcomings in the legal system. Frequent interaction with financial authorities, as well as the role that reputation plays in the cluster, can greatly increase confidence between firms and financial institutions and thus make it easier to get loans and lower rates of interest. Working together also means firms can get supplier credits and can borrow from each other when necessary, which reduces general costs. Such clusters, however, are very little developed in Africa and are concentrated in South Africa, Kenya, Nigeria, Tanzania and Zimbabwe.

Notes

1. This section draws on Kauffmann (2005) and summarises the findings of the *OECD African Economic Outlook 2004/05*, with a special focus on financing SMEs in Africa.
2. In countries such as South Africa, the high hurdle rate induced many top corporations to leave the local capital market in the search for a head-listing in the London or New York Stock Exchanges (Grandes and Pinaud, 2005).
3. South Africa's cost of capital for an average ungeared company (i.e. a firm without debt) as of July 2004 was about 15.5%: a 10% yield on the 10 year South African Government bond denominated in rand currency, plus a 5.5% equity risk premium. The equivalent measure for a US company was 8.5% (4.5% on Treasuries plus an equity risk premium of 4%) and the UK of 9% (5% on Gilts plus an equity risk premium of 4%). This means that an ungeared South African company has to make a return of 15.5% on its capital before it makes a true profit, whereas the equivalent return for an average US company is only 8.5% and for an average UK company is only 9%.

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Annex B

Defining SMEs and Entrepreneurship

Box B.1. Defining SMEs

There is no single agreed definition of an SME. A variety of definitions are applied among OECD countries, and employee numbers are not the sole defining criterion. SMEs are generally considered to be non-subsidary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are mostly considered to be firms with fewer than 50 employees while micro-enterprises have at most ten, or in some cases, five employees.

Financial assets are also used to define SMEs. In the European Union, a new definition came into force on 1 January 2005 applying to all Community acts and funding programmes as well as in the field of State aid where SMEs can be granted higher intensity of national and regional aid than large companies. The new definition provides for an increase in the financial ceilings: the turnover of medium-sized enterprises (50-249 employees) should not exceed EUR 50 million; that of small enterprises (10-49 employees) should not exceed EUR 10 million while that of micro firms (less than 10 employees) should not exceed EUR 2 million. Alternatively, balance sheets for medium, small and micro enterprises should not exceed EUR 43 million, EUR 10 million and EUR 2 million, respectively. In addition to satisfying the criteria for the number of staff and one of the two financial thresholds, an SME must be independent; to this end, the new definition distinguishes between autonomous enterprises, partner enterprises and linked enterprises. Finally, the new definition, introducing precise financial thresholds for micro-enterprises, thus recognises the essential role of the latter in the economy.

The approach taken by the OECD, and in particular by the Working Party on SMEs and Entrepreneurship, is to work with both the national, regional and Community definitions and to attempt to achieve some degree of international comparability.

Box B.2. Defining entrepreneurship

Entrepreneurship has typically been referred to as an action, process, or activity, in which creativity, risk-taking and innovation play a significant role. Substantial entrepreneurial behaviour can occur among existing entrepreneurs and existing firms, including longer established firms, and the systematisation of innovation and commercialisation within existing firms. The recent *Green Paper on Entrepreneurship in Europe* by the European Commission defines it as follows: “entrepreneurship is the mindset and process to create and develop economic activity by building risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation”. Despite the definitional differences, it is commonly agreed that entrepreneurship is a driving force behind SMEs.

Various research projects underway or recently undertaken in relation to the topic of entrepreneurship, adopt differing definitions for entrepreneurship policy. For example, the research project Entrepreneurship Policy for the Future, led by Lundström and Stevenson (2001, 2002), defines entrepreneurship policy as “aimed at the pre-start, the start-up and post start-up phases of the entrepreneurial process; designed and delivered to address the areas of motivation, opportunity and skill; and with the primary objective of encouraging more people in the population to consider entrepreneurship as an option, to move into the nascent stage of taking the steps to get started and then to proceed into the infancy and early stages of a business.” The Finnish Government’s “Entrepreneurship Project” used measures corresponding to the different stages of the enterprise lifecycle and concluded a need for governments to move away from traditional SME policy towards a more comprehensive enterprise/entrepreneurship policy. The Danish Government launched the “Entrepreneurship Index Survey”, involving a number of other countries, and designed to develop tools for monitoring the entrepreneurial business environment.

The OECD too has addressed the issue of entrepreneurship from a number of angles, including from the local economic development perspective, emphasising the role of entrepreneurship and creation of enterprise for local economic development and as drivers of growth in the world economy (OECD, 1998a, 2003a). In the context of the *OECD Growth Study* and its follow-up, and on the occasion of the 2nd OECD SME Ministerial Conference held in 2004, the OECD has also focused on the role of innovation in addition to the lifecycle of entrepreneurship, passing from inception, development, and expansion of the enterprise.

The accumulated body of work on entrepreneurship and SMEs to date indicates the existence of a rationale for both an entrepreneurship policy and for an SME policy. The OECD takes the approach that entrepreneurship policy cannot substitute for SME policy but needs to be seen in the wider context of SME policy, as without sound entrepreneurship policies there cannot be strong SMEs. Neither can SME policy substitute for entrepreneurship policy. The two policies are complementary and should be carried out together, from the would-be or aspiring entrepreneurs to the large firms. Therefore, entrepreneurship policy and SME policies need to be viewed as a continuum, encompassing the pre-start-up, start-up, growth, and expansion stages of the enterprise (OECD, 2004a). Furthermore, the approach taken considers entrepreneurship policy as directed more towards individuals (isolated or in teams) and considers SME policy as concerning firms per se, and geared to creating and growing these businesses.

Source : OECD (2004a): *Fostering Entrepreneurship and Firm Creation as a Driver of Growth in a Global Economy*, www.oecd.org/cfe/sme

Table B.1. Distribution of enterprises¹ by firm size in manufacturing, 2001²

COUNTRY	in percent				
	less than ten	10-49	50-99	100-499	500+
Australia	72.6	21.8	2.8	2.2	0.6
Austria	69.0	23.3	3.3	3.8	0.6
Belgium	79.4	15.5	2.4	2.2	0.5
Czech Republic	89.2	7.6	1.5	1.4	0.3
Denmark	70.7	21.8	3.6	3.3	0.6
Finland	83.4	12.0	2.2	1.9	0.5
France	81.8	13.9	2.0	1.9	0.4
Germany	64.0	26.5	4.3	4.3	0.9
Greece	..	79.4	9.6	9.7	1.3
Hungary	86.0	10.4	1.6	1.6	0.3
Ireland	37.3	42.3	9.5	9.3	1.5
Italy	83.3	14.5	1.3	0.8	0.1
Japan	50.9	39.2	5.4	4.0	0.5
Netherlands	77.0	16.7	3.2	2.6	0.4
New Zealand	81.3	15.3	1.7	1.4	0.3
Norway	61.3	29.4	4.6	4.0	0.7
Poland	89.7	6.5	1.6	1.8	0.3
Portugal	78.9	16.7	2.6	1.6	0.2
Slovak Republic	45.8	34.2	7.5	9.9	2.5
Spain	77.9	18.9	1.8	1.2	0.2
Sweden	85.4	10.8	1.8	1.6	0.4
United Kingdom	71.7	21.0	3.5	3.2	0.6
United States	48.3		33.0	7.1	11.7

Notes: 1. Establishments for Australia, Japan & United States.
 2. Or latest year available.

Source: OECD (2005), Statistics on Enterprises by Size Class (SEC) database. OECD, Paris.

Data notes

In the tables included in this Statistical Annex, some size classes may differ for particular countries: For example:

Australia: The size class “50-199” is used instead of “50-249”; “100-199” instead of “100 - 249”; “200 and more” instead of “250 and more”; “200-499” instead of “250-499”.

Greece: Data for size enterprises with less than 9 employees are not available.

Japan: The size class “4-9” is used instead of “1-9” class.

Korea: The size class “50-299” are used instead of “50-249”.

The size class “300 and more” is used instead of “250 and more”.

United States: The size class “10-99” replaces “10-49” & “50-99”.

Note that in the tables the sum of the different size classes may not always total 100%, for reasons of *inter alia*, data availability.

The symbol “..” is used when data are not available.

Table B.2. Distribution of employment by firm size in manufacturing, 2001¹

COUNTRY	in percent				
	less than ten	10-49	50-99	100-499	500+
Australia	14.1	20.5	8.8	22.5	34.2
Austria	9.8	19.0	9.2	33.0	29.1
Belgium	11.6	18.9	9.5	25.5	34.6
Czech Republic	14.2	15.6	9.7	28.3	32.2
Denmark	7.6	19.1	10.4	28.0	35.0
Finland	8.6	15.4	9.1	24.4	42.5
France	11.8	18.9	8.5	24.5	36.3
Germany	7.0	15.1	8.7	25.8	43.4
Greece	..	26.6	12.5	36.0	24.9
Hungary	14.0	16.5	8.9	28.2	32.4
Ireland	3.7	18.4	12.6	36.6	28.7
Italy	25.1	31.2	9.9	17.4	16.4
Japan	10.8	28.4	13.3	27.3	20.2
Netherlands	11.2	23.3	12.6	29.0	23.9
New Zealand	19.1	24.2	9.3	21.3	26.1
Norway	8.7	22.9	11.5	29.1	27.8
Poland ²	19.4	12.8	9.7	31.5	26.6
Portugal	18.9	28.1	14.2	24.3	14.4
Slovak Republic	4.1	11.1	8.3	31.3	45.2
Spain	19.0	32.5	10.7	20.2	17.6
Sweden	11.1	15.2	8.7	21.7	43.3
United Kingdom	10.1	18.8	10.4	28.1	32.6
United States	11.0	25.7		14.5	48.8

Notes: 1. Or latest year available.
 2. Salaried employees for Poland.

Source: OECD (2005), *Statistics on Enterprises by Size Class (SEC) database*. OECD, Paris.

Table B.3. Distribution of enterprises¹ by firm size in manufacturing, 2002²

COUNTRY	in percent			
	less than ten	10-49	50-249	250+
Australia	72.6	21.8	4.1	1.5
Austria	71.0	21.8	5.5	1.6
Belgium	79.4	15.5	4.1	1.0
Czech Republic	89.2	7.6	2.6	0.7
Denmark	71.4	21.1	6.0	1.5
Finland	84.0	11.4	3.6	1.0
France	81.6	14.0	3.4	0.9
Germany	62.1	27.3	8.4	2.2
Greece	..	79.4	17.1	3.5
Hungary	87.2	9.4	2.7	0.8
Ireland	39.0	42.0	15.2	3.8
Italy	83.4	14.4	1.9	0.3
Japan	50.9	39.2	8.5	1.4
Korea	88.6	8.3	2.9	0.2
Netherlands	74.7	18.9	5.2	1.2
New Zealand	81.3	15.3	2.7	0.6
Norway	60.6	29.4	7.6	1.7
Poland	89.7	6.5	3.0	0.8
Portugal	78.9	16.7	3.9	0.5
Slovak Republic	44.2	32.7	17.2	6.0
Spain	78.4	18.4	2.8	0.5
Sweden	85.4	10.8	3.0	0.8
United Kingdom	71.7	21.0	5.9	1.5

Notes: 1. Number of establishments for Australia and Japan.
 2. Or latest year available.

Source: OECD (2005), *Statistics on Enterprises by Size Class (SEC) database*. OECD, Paris.
 For Korea, the source data is: Korea National Statistical Office.

Table B.4. Distribution of employment¹ by firm size in manufacturing, 2002²

COUNTRY	in percent			
	less than ten	10-49	50-249	250+
Australia	14.1	20.5	17.8	47.7
Austria	10.3	18.9	26.9	43.8
Belgium	11.6	18.9	23.8	45.8
Czech Republic	14.2	15.6	25.5	44.7
Denmark	7.4	18.9	26.3	47.4
Finland	9.0	14.8	22.5	53.7
France	12.0	19.0	22.3	46.7
Germany	6.7	14.5	23.7	55.1
Greece	..	26.6	34.0	39.5
Hungary	16.1	16.5	23.2	44.2
Ireland	4.4	19.2	32.3	44.2
Italy	25.5	31.0	20.8	22.8
Japan	10.8	28.4	29.9	30.9
Korea	42.9	20.7	23.2	13.3
Netherlands	9.9	23.3	30.6	36.2
New Zealand	19.1	24.2	21.4	35.3
Norway	8.7	22.9	28.3	40.1
Poland	19.4	12.8	27.9	39.9
Portugal	18.9	28.1	29.3	23.7
Slovak Republic	3.5	10.0	26.4	60.0
Spain	19.2	31.9	22.6	26.2
Sweden	11.1	15.2	20.7	53.0
United Kingdom	10.1	18.8	25.8	45.3

Notes: 1. Salaried employees for Korea and Poland.
2. Or latest year available.

Source: OECD (2005), *Statistics on Enterprises by Size Class (SEC) database*. OECD, Paris.
For Korea, the source data is: Korea National Statistical Office.

Annex C

Initial Findings: OECD SME Financing Questionnaire

Background

Some 20 OECD and 10 non-OECD economies participated in a survey of SME policy experts to develop an initial understanding of the existence and/or character of the SME financing gap in countries as well as the state of empirical measurement of various aspects of SME financing. The survey was directed to both government policy and central bank personnel, with expertise in SME financing. Most of the responses, however, came only from the government policy experts.

Perhaps the most revealing finding from the Survey was the fact that there are still relatively few countries that have extensive data on SME financing. Furthermore, since there are no commonly understood definitions and concepts pertaining to SME financing, and particularly pertaining to the notion of a “financing gap”, it is difficult to aggregate data even for those countries that have undertaken empirical studies in this field.

Given those limitations, it is difficult to produce much internationally comparable statistical information on SME financing, but the responses are interesting nonetheless, perhaps most of all in terms of what they reveal about the different character of the situation in OECD and non-OECD economies.

Do countries feel there is an SME Financing Gap?

There is no agreed-to definition of what constitutes a financing gap so this question yielded a variety of responses. Some 80% of the responding OECD countries, and 90% of responding non-OECD economies, feel that a gap of some type exists. But this general evaluation masks a lot of differences in the detailed descriptions of the nature of or reasons for the gap. Furthermore, the identification of a financing gap is largely based on an analytical or even subjective assessment, rather than thorough application of a concrete definition and empirical analysis.

Where is the Gap?

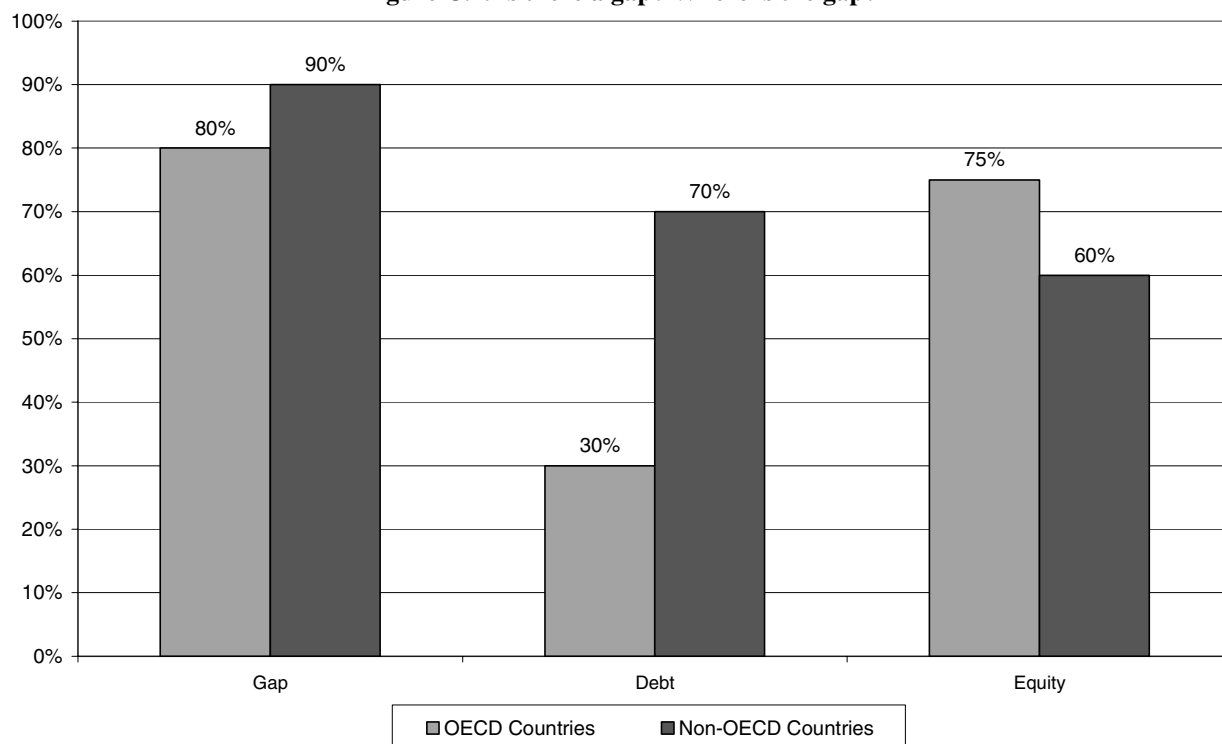
Countries have adopted broad definitions of the term “financing gap”. Both weak demand from SMEs for financing and any limitation in the supply of funds were indicative of a “gap” in some cases. Furthermore, some countries have described a rather general gap; others have indicated that the gap applies to particular sectors or specific groups of borrowers, such as women or minorities.

While most OECD countries reported a finance gap, it was primarily in terms of equity financing and even here the gap may be concentrated in certain sectors. Several

countries noted, for example, that the gaps were most evident in the case of start-ups and/or high-tech firms.

OECD and non-OECD economies differ significantly on the matter of a debt vs. equity gap in SME financing, as Figure C.1 illustrates. Only 30% of the OECD responses identified a gap on debt financing, while 70% of non-OECD economies felt a gap exists here. However, the proportions of OECD and non-OECD economies that felt an equity financing gap exists were more similar at 75% and 60% respectively.

Figure C.1. Is there a gap? Where is the gap?



Reasons for the Financing Gap

A very wide variety of reasons were given by countries for the financing gap with responsibility attached both to the financial sector, as suppliers of funds; SMEs, as demanders of funds; and general economic and/or infrastructure conditions in a country. The wide variety of responses makes it impossible to tabulate results by specific reason but certain threads were common in the various national explanations. Among the most commonly mentioned themes were:

- Asymmetric information;
- Lack of trust between entrepreneurs and investors;
- Lack of management skills and poor business plans from the SMEs;
- Lack of a track record and collateral in SMEs;
- Limited margins for banks on small loan amounts; and,
- Conservative nature of financial markets.

How Do Countries Measure The Financing Gap?

Only three of the responding OECD countries have established explicit programmes aimed directly at measuring and understanding the SME financing gap. Another nine countries indicated other means of assessing the gap while eight either admitted to no systematic assessment or simply did not answer this question. Interestingly, while four of the twenty responding OECD countries indicated there was no financing gap, only one of them indicated that explicit measurement had been undertaken to actually determine whether there was a gap.

Among the ten responding non-OECD economies, none have developed explicit programmes to measure the financing gap. Three indicated that some analysis is, or could be, undertaken to understand the gap. All the others said that no measure is available or did not answer the question.

Informal Financial Markets

The majority of the responding OECD countries reported that there was little or no evidence of the existence of an informal financial market. That assessment, though, seems based on a relatively narrow definition of “informal financial market”. In its SME Financing Data Initiative, Canada defines the informal market to include money from angels, family and friends. Using this definition, virtually all the OECD countries who actually responded to this question indicated that these “informal” sources of financing were important in their countries. In all cases, the firms that make most use of these sources of funding are the small and young SMEs.

SME Financing Requests

Only nine OECD countries were able to estimate the percentage of SMEs who have requested debt financing from formal sources and in seven cases, the proportion was low (under 40%). Two outliers reported that a “majority” or even “all” SMEs were said to have sought formal debt financing.

With one exception, where a 36% success rate was listed, the ability of SMEs to get the financing they were seeking was rated generally high, at 70% or above. However, measures for this success rate were only available from seven OECD countries.

Even fewer countries had measures pertaining to those SMEs seeking equity financing. Five countries reported that only a small proportion of SMEs requested or received equity financing (from 5% to 6% of companies). Estimates of success rates were given in only three cases and they ranged from 60% to 84%.

These success rates, though, should be interpreted with some caution. A large proportion of SMEs in all OECD countries have few, if any, employees and these owner-manager firms are rarely targeting growth. These firms have limited need for external financing so it is not surprising that their modest needs are often met. This may not be the case of SMEs with higher growth expectations, and greater financing needs. The Finish survey response revealed that only 5% of all SMEs had trouble accessing the financing that they required. But half the sub-group of SMEs that are aiming to grow, which comprised 6% of all Finish SMEs, indicated they had difficulty accessing the financing that they needed.

Unfortunately, data on SME financing requests and success rates for non-OECD economies were too sparse to draw any conclusions.

Surveys to Analyse SME Financing

It was somewhat surprising to find that 78% of responding OECD countries and half the responding non-OECD economies reported that they had undertaken a survey to analyse SME financing activity. Except in very few cases, little is known about these questionnaires and survey respondents did not provide, or links to, the overall survey results. Given the lack of data available to respond to most of the quantitative questions on the OECD questionnaire, it is assumed that many of the SME financing questionnaires are likely of a subjective, rather than quantitative, nature.

Government SME Financing Programmes

Governments of both OECD and non-OECD economies are very active in various SME financing programmes (Figure C.2. and Figure C.3.). The fifteen responding OECD countries identified some USD 500 billion in SME financing programmes with the majority targeted to lending and guarantee schemes, and little to venture capital and other programmes. However, practices were quite dissimilar across countries. Some invest considerably in lending programmes, while others put no public funds into lending at all, preferring to support guarantee schemes.

Figure C.2. OECD countries: Government SME financing programmes
as % of the total

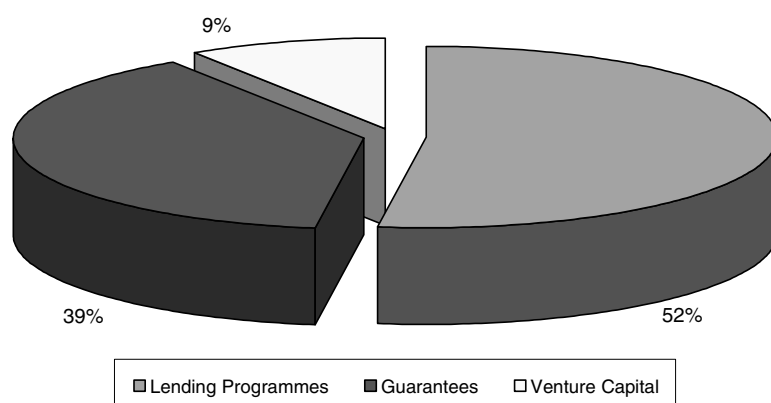
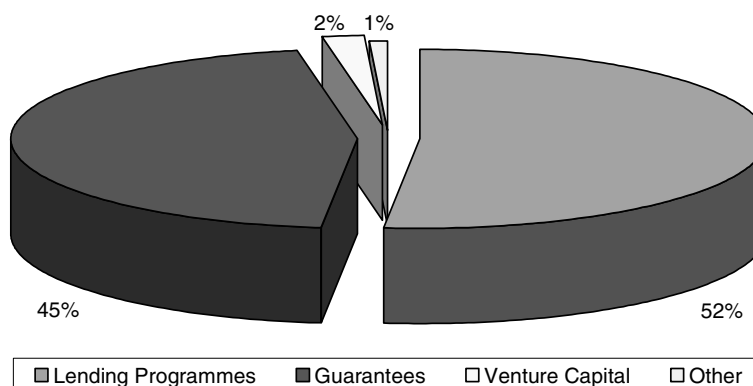


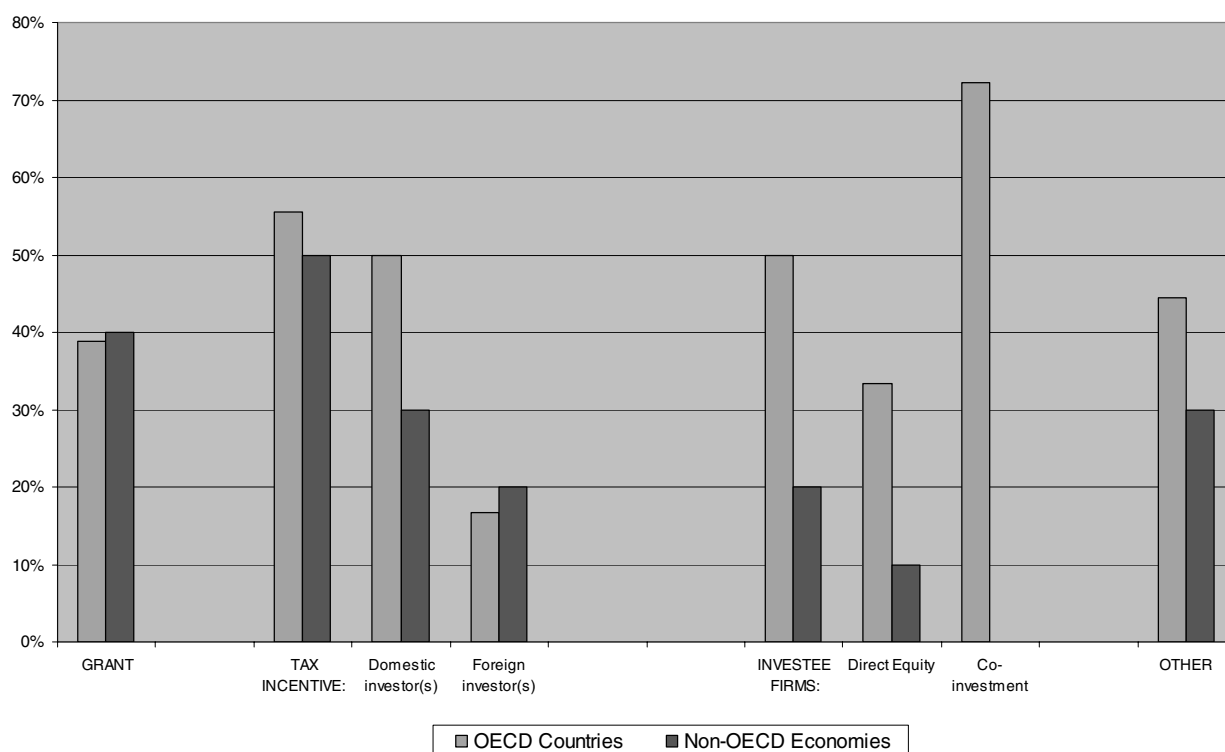
Figure C.3. Non-OECD economies : Government SME financing programmes
as % of the total



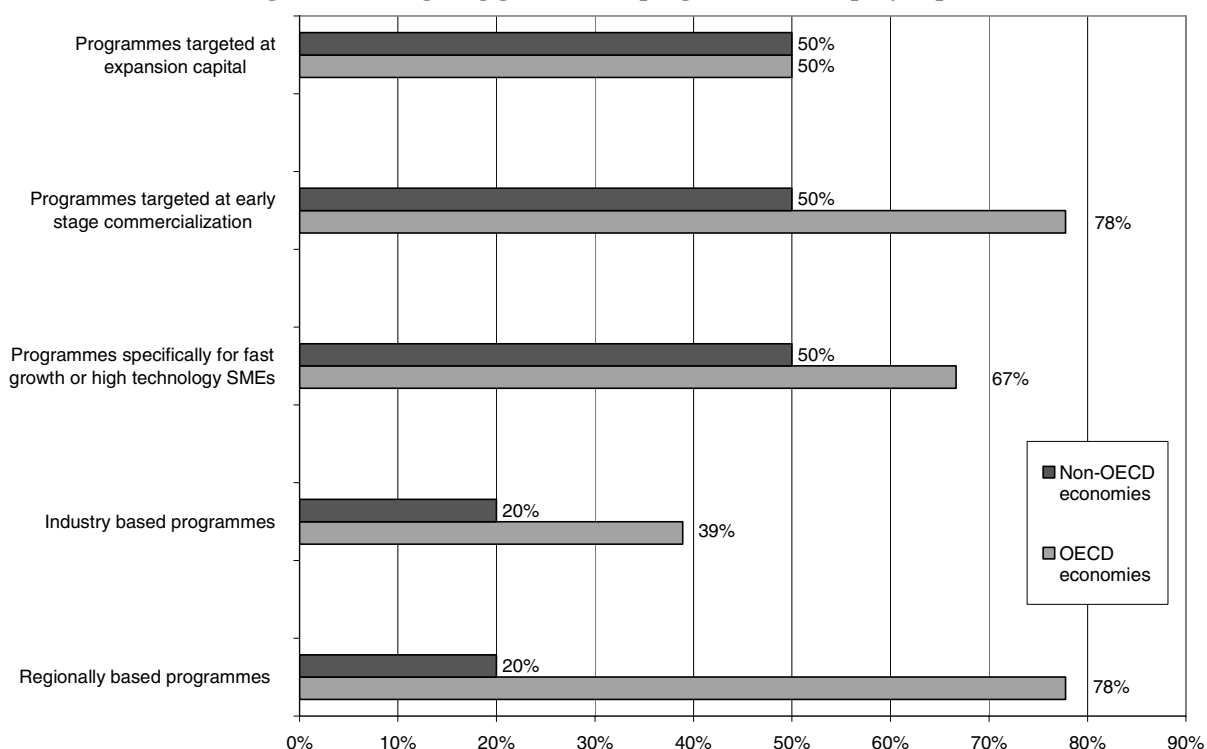
Government Programmes for Equity Capital

Governments of both OECD and non-OECD economies are also very active in equity capital programmes (Figure C.4.). Almost 40% of respondents indicated grants are used, while 50% or more have tax incentive schemes. Virtually almost all the OECD countries with tax incentive programmes make those programmes available to domestic investors. A sub-set of those OECD country programmes are also available to foreign investors. In the case of non-OECD economies, some have programmes only for domestic investors and others have programmes only for foreign investors.

Figure C.4. Types of government equity capital programmes

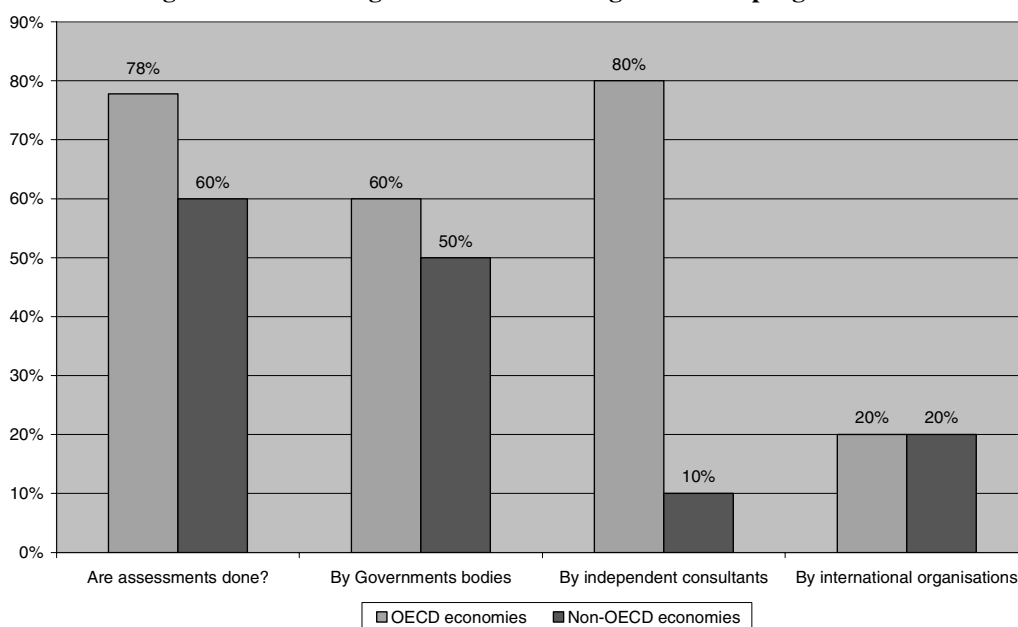


OECD countries have more refined or customised programmes. They are more likely to target programmes by region, industry or stage of firm development, than are their non-OECD counterparts (Figure C.5.).

Figure C.5. Targeting government programmes for equity capital

Measuring Effectiveness of Government Financing Programmes

Those responsible for government financing programmes have largely shown a willingness to have them assessed. Figure C.6 shows that almost 80% of OECD countries and 60% of non-OECD economies had some type of assessment undertaken on the finance programmes. OECD countries showed a greater inclination to use independent consultants than their counterparts in non-OECD economies.

Figure C.6. Assessing the effectiveness of government programmes

Annex D

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