

GOVERNMENT VENTURE CAPITAL FOR TECHNOLOGY-BASED FIRMS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

OECD governments are investing an estimated US\$ 3 billion per year of risk finance in small, innovative firms. Despite the existence of a US\$ 100 billion venture capital industry world-wide, governments are mounting programmes to fill “funding gaps” that prevent small businesses from obtaining sufficient capital. These are primarily technology-based firms whose attempts to innovate may be viewed sceptically by traditional sources of finance. Government venture capital schemes are intended to capture public benefits in terms of increased innovation, growth and job creation. Through these programmes, governments are directly supplying capital to firms, giving financial incentives to venture capital investments and broadening investment rules. The schemes tend to be controversial, particularly regarding their impact on private capital sources. Close attention must be given to their design and management to ensure capital is being directed to the desired targets and public funds are being used to leverage private venture capital funding.

The analysis of government venture capital programmes is part of the work of the Working Group on Innovation and Technology Policy (TIP) of the OECD Committee for Scientific and Technological Policy (CSTP) to identify “good practices” in innovation and technology policies in the OECD countries. This study is a follow-up to a previous workshop on indirect government measures to stimulate private sector venture capital [OCDE/GD(96)168]. It discusses factors to be taken into account in the design of venture capital programmes -- including equity investments, loans, tax incentives and equity and loan guarantees. It also contains an Annex describing the main government venture capital programmes now in operation in the OECD countries. It has been declassified by the CSTP.

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SUMMARY

Governments can stimulate the supply of venture capital by modifying fiscal and regulatory frameworks. In addition, OECD governments are implementing a number of more direct programmes to mobilise venture capital in support of small, innovative firms. These programmes aim to fill “*funding gaps*” that prevent small businesses, particularly technology-based firms, from obtaining sufficient capital and from producing public benefits in terms of innovation and job creation. Government venture capital schemes aim to remedy deficiencies in private capital markets, to leverage private sector financing and to nurture technology-based firms over the longer-term.

There are broadly three types of government programmes: 1) *direct supply of capital* to venture capital firms or small firms; 2) *financial incentives* for investing in venture capital funds or small firms; and 3) *regulations* controlling types of venture capital investors. The first of these is the most high-profile and high-risk way of providing financial resources to venture capital funds or small firms; here, capital is provided as equity investments and low-interest loans. The number of such programmes is limited but increasing in the OECD area. Financial incentives are more widely used and are intended to stimulate private sector investment; these incentives most often take the form of tax credits or deductions, guarantees of loans taken out by venture capital firms or by small start-ups, or guarantees of equity investments made by venture capital firms. Investor regulations, the third category of programmes, are now being reviewed and revised in many OECD countries in order to broaden the types of institutions, particularly pension funds, permitted or encouraged to make venture capital investments.

There are numerous factors to be taken into account when designing and implementing these venture capital schemes in order to ensure they fulfil their original aims and are directed to their desired targets. Most of these factors are specific to the type of scheme in question, but the following are some general guiding principles:

Design – The configuration of schemes must consider the nature and extent of the investment incentives, whether they are aimed at venture capital firms or directly at small firms, the stages of investment to be targeted, risk factors and the leveraging effects on private capital.

Additionality – Venture capital programmes should seek to stimulate private sector funding and create a commercially viable market, which would allow government schemes to be phased out as private sources of capital expand.

Management – Successful venture capital programmes are those which elicit private sector participation in the design stage and where the private sector plays a professional role in the programme’s management.

Process – The process whereby a small firm, investor or venture capital fund applies for an incentive should be simple, straightforward and not unnecessarily long.

Transparency – Steps should be taken to disseminate widely information about government programmes to venture capitalists, investors and enterprises.

Evaluation – Venture capital programmes should be evaluated and assessed on a regular basis. One criteria for measuring success is the extent to which venture capital funds or small firms are created which can operate on a commercial basis, i.e. generate an attractive rate of return.

TYOLOGY OF VENTURE CAPITAL PROGRAMMES

INDIRECT MEASURES

Venture capital is essential to the financing of the innovative process. Venture capitalists are needed to support high-risk investments in small firms, particularly technology-based firms, that are passed over by traditional financial institutions. The principal ways that governments support venture capital and small and medium-sized enterprises (SMEs) are by creating proper economic, institutional and regulatory frameworks within which markets can effectively channel resources to new and innovative enterprises. For example, governments can encourage the development of secondary stock markets, encourage financial institutions to offer a wider range of products, stimulate networking among large and small firms and facilitate entrepreneurship. These measures are described and analysed in a previous OECD publication [OCDE/GD(96)168]. Indirect measures are closely interrelated with direct measures taken by governments to increase the supply of venture capital, which are the subject of this paper.

Through the fiscal and legal frameworks they establish, governments create the environment for venture capital and innovative small firms and determine the types of financial instruments that will be designed and used by the market. In general, indirect measures can affect:

Tax transparency – If income and gains from investments are taxed first when paid to a venture capital fund and again when the fund distributes these profits to its investors, the resultant effective tax rate will discourage investors. By treating venture capital funds as tax transparent structures, governments can eliminate double taxation.

Tax provisions – The capital gains tax rate has an influence on the willingness of entrepreneurs to start up new businesses. The level at which their equity stake will be taxed changes the attractiveness of starting-up a new enterprise. Differences in the tax treatment of employees and the self-employed can also create differences in the incentives to start a business.

Intellectual property protection – For many early-stage companies, intellectual property represents almost the entirety of their assets. To nurture these assets, it is important that countries process patents in a timely and efficient manner and have an effective enforcement system for patent protection.

Capital markets – It is important that governments encourage exit mechanisms which will increase the liquidity for investors. Concomitant with establishing liquid markets is the need for effective capital market regulations which give investors confidence without unduly burdening issuers.

Stock options – For many entrepreneurs, stock options represent a large part of their financial incentive. Securities rules governing the issuance of stock options, and fiscal rules determining their taxation, influence whether entrepreneurs find it sufficiently attractive to risk investing in an early-stage company.

Information flow – Governments can improve the dissemination of information by putting those seeking financing in touch with possible investors. They can publish directories of venture capital sources. Some countries attempt to create business angel networks to improve the flow of informal venture capital from wealthy individuals to innovative start-ups.

DIRECT MEASURES

Besides crafting appropriate framework conditions, many OECD governments have implemented their own programmes to mobilise venture capital in support of small, innovative firms. Direct government measures refer to specific publicly-funded schemes which increase the supply of venture capital financing. These programmes have primarily taken the form of financial incentives, but also include more high-risk equity investments and government loans. Such instruments can be directed to venture capital firms and/or directly to small and medium-sized enterprises. There are two main rationales for these government programmes:

- ◇ **Public benefits** – Governments believe venture capital programmes are capable of yielding social rates of return greater than private rates of return. Schemes may attempt to gain public benefits by targeting small firms with good job creation potential or those who may develop technologies important to long-term growth.
- ◇ **Funding gaps** – Governments may endeavour to fill a “*funding gap*” that prevents viable small businesses from obtaining sufficient funding on reasonable terms; this may reflect either insufficient liquidity in the financial system or a misdirection of liquidity, which could be due in part to government regulations as well as other factors. There are indications that capital markets may be discriminatory and favour larger, more established enterprises. There is also evidence that technology-based firms have greater difficulties locating sources of finance than other enterprises.

The diverse forms of public policy instruments aimed at stimulating the supply of venture capital in OECD countries may be grouped into three main categories: 1) *direct supply of capital* to venture capital funds or small firms; 2) *financial incentives* to investing in venture capital funds or small firms; and 3) *investor regulations* determining the types of investors in venture capital (see **Box 1**). For each type of venture capital programme listed in this typology, one of the more significant examples from an OECD country has been chosen as an illustration. The **Annex** to this report contains detailed information on OECD government venture capital programmes categorised according to this typology.

While national programmes are the focus of this report, it should be noted that along with these broad initiatives, many countries employ local or regional initiatives. For example, in the United States, most of the 50 states have some type of venture capital programme. Italy, Spain, Ireland, and the European Union all have regional venture capital schemes targeted towards their economically-disadvantaged regions. It is important that venture capital programmes at different levels or for different purposes be part of a coherent system; overlaps and inconsistencies in publicly-supported programmes could introduce distortions and inefficiencies into capital markets and venture capital supply.

Box 1. Typology of government venture capital programmes

TYPE	PURPOSE	EXAMPLE
DIRECT SUPPLY OF CAPITAL:		
<i>Government equity investment</i>	To make direct investments in venture capital firms or small firms	Belgium – Investment Company for Flanders (GIMV)
<i>Government loans</i>	To make low-interest, long-term and/or non-refundable loans to venture capital firms or small firms	Denmark – VækstFonden (Business Development Finance) Loan Programme
FINANCIAL INCENTIVES:		
<i>Tax incentives</i>	To provide tax incentives, particularly tax credits, to those investing in small firms or venture capital funds	United Kingdom – Enterprise Investment Scheme and Venture Capital Trusts
<i>Loan guarantees</i>	To guarantee a proportion of bank loans to qualified small businesses	France – Société Française de Garantie des Financements des Petites et Moyennes Entreprises (SOFARIS)
<i>Equity guarantees</i>	To guarantee a proportion of the losses of high-risk venture capital investments	Finland – Finnish Guarantee Board
INVESTOR REGULATIONS:	To allow institutions such as pension funds or insurance companies to invest in venture capital	United States – modifications of Employment Retirement Income Security Act (ERISA)

Source: OECD (see Annex).

FACTORS IN DESIGN OF VENTURE CAPITAL PROGRAMMES

GENERAL DESIGN

Stage of investment

Government venture capital programmes may be designed to help companies at particular stages of development. Programmes may be targeted to start-up firms, growth firms or even mature firms (*see Box 2*). The different types of finance can be termed early-stage financing, later-stage financing and mature or late-stage financing. Thus, venture capital can be used to finance the launch, early development, expansion or restructuring of a business. It can also finance new product lines, debt reductions, acquisitions and management buy-outs or buy-ins. For example, venture capital schemes can give their benefit at exit (when the firm is sold or merged) by reducing the tax on capital gains. In general, venture capital is an alternative source of funding which is more risky and less liquid than most other forms of finance. Governments must decide at which stage of company development their programme is aimed. Some programmes act on more than one stage of an investment cycle.

Studies show that start-up firms are most in need of support and thus early-stage financing may be most valuable. In almost all countries, private funding flowing to this type of company is inadequate. The OECD venture capital industry as a whole, particularly in countries outside the United States, has a relatively low level of investment in seed, start-up and early-stage firms. Yet without a healthy supply of start-ups, the vitality of later stages of investment is reduced. At the same time, private sector avoidance of early-stage investments is understandable and reflects the below-average returns which have been illustrated by performance measurement studies. However, it has also been shown that returns on this stage begin to rise as experience is accumulated and the venture capital industry achieves a critical mass. In this way, governments who supply venture capital to young firms in the early stages of their investment cycles can play a *pump-priming role*.

The types of venture capital programmes which can be most effective in supporting early-stage firms are: 1) government direct equity investment; 2) tax incentives given to investors in early-stage SMEs; 3) equity guarantees for venture capital funds investing in these companies; and 4) support for certain costs of early-stage funds, such as appraisal or operating costs, which will thus increase portfolio return. In contrast, programmes that offer debt financing or loan guarantees, while they may have some use for early-stage companies, are less appropriate due to the capital-constrained nature of most early-stage companies which renders debt servicing difficult.

Box 2. Stages of business development and finance

STAGES OF BUSINESS DEVELOPMENT	START-UP FIRMS	GROWTH FIRMS	MATURE FIRMS
	No demonstrated track record; Minimal business system development.	Demonstrated product potential on small scale or prototype basis; Proven management team; Rapid business system development.	Stabilisation of competition; Development of sophisticated business systems; Increasing concentration on cost economies.
STAGES OF FINANCE	EARLY-STAGE FINANCING	LATER-STAGE FINANCING	MATURE AND LATE-STAGE FINANCING
	Seed finance – A relatively small amount of capital provided to an inventor or entrepreneur to develop and/or prove a concept.	Second-stage finance – Working capital provided for the initial expansion of a company.	Turn-around finance – Financing provided for companies in trouble for bankruptcy or reorganisation purposes.
	Start-up finance – Financing provided to companies for product development and marketing.	Third-stage finance – Financing provided for major expansion of a company whose sales volume is increasing.	Management/leveraged buy-out – Financing provided for management to acquire equity interest in firm.
	First-stage finance – Financing provided to companies to initiate commercial manufacturing and sales.	Bridge finance – Financing provided for a company expecting to go public within six months to a year.	Mergers/acquisition/privatisation – Financing provided to cover firm's share of costs in a merger, acquisition or privatisation of company.

Type of firm

Government venture capital programmes may be designed to aid particular types of companies and thus can be targeted to technology-based firms in the interest of promoting innovative capacity. Technology-based firms are likely to have seed and early-stage costs which are higher than for other small firms. Because of the perceived high risks, unproven innovations and difficulties in assessing the size of the potential market, technology-based firms often have greater problems finding external sources of finance. In addition, potential finance providers often underestimate potential returns and may not have the skills needed to properly evaluate the risks involved in investing in this sector. Surveys have found that newer and smaller firms are likely to perceive a significantly greater financial constraint on innovation than older and larger firms. Other research indicates that technology-based firms find it disproportionately difficult to obtain finance from traditional institutions (Bank of England, 1996).

Government programmes can be tailored with technology-based firms as their target, and there are similarities between investments in early-stage and in technology-based companies. Both are unable to receive significant private sector financing in most countries. Both are generally short of collateral to use against borrowing. Thus, the most appropriate forms of support for technology-based firms resemble those for early-stage companies: 1) government direct equity investment; 2) investor tax incentives; and 3) equity guarantees. For technology-based firms, it is often true that their management skills are concentrated in technical and scientific areas. Programmes which address this shortcoming, by augmenting companies' financial and management skills, can greatly enhance the odds of survival. Direct equity investment programmes most easily lend themselves to the provision of such value-added; this should certainly be a consideration in choosing the type of venture capital programme and its design. Consideration must be also given to factors of culture, economic environment and capital markets that strongly influence development of venture capital in any country and its role in promoting the development of technology-based firms (*see* **Box 3**).

Box 3. Venture capital and technology-based firms in Israel

In 1990, Israel had only two venture capital funds. Today, there are 40 funds devoted to technology-based firms and another 30 funds with more diversified portfolios. Israel is home to an estimated 2 000 high-technology companies and has over 40 companies trading on the United States' NASDAQ market. Understandably, other countries are envious of Israel's record in promoting the emergence of innovative firms. *What are the lessons they can learn from Israel?*

At first, Israel's example may discourage other countries. Certainly several of its elements for success are not practical for transfer. Namely:

- The Israel Defense Force (IDF) has been essential to high-technology development. Technological know-how acquired while serving in the IDF has since been put to use by many entrepreneurs.
- Unique factors have contributed to a culture in Israel that is unusually at ease with risk. In fact, risk-taking could be said to be viewed as a badge of honour.
- The country has a tremendous intellectual capital which has been bolstered in the past five years by 750 000 immigrants from the former Soviet Union, many of them highly skilled. Israel has the highest ratio of engineers of any country.

Nonetheless, some of the initiatives taken by Israel may serve as useful examples for elsewhere:

- The Israeli government supplied US\$ 100 million in 1993 to start Yozma, a venture capital fund investing in high-tech start-ups. Yozma grew into nine hybrid funds and is widely given credit for being the catalyst that created Israel's flourishing venture capital industry. Israel decided that by 1996, private sector venture capital was sufficiently robust for the government to sell its Yozma participation. It successfully auctioned off its direct co-investments in 14 companies and sold its interest in the nine Yozma funds to its co-investment partners.
- The government's Office of the Chief Scientist offers generous grants. The annual budget for the Office of the Chief Scientist is US\$ 500 million which is used to pay up to half a company's R&D costs for projects likely to lead to exports. Key technologies are also targeted. The average Israeli start-up receives about US\$ 150 000 a year.
- The Israeli government offers attractive tax incentives and grants to lure US technology companies. For example, Intel is receiving help in financing a US\$ 1.6 billion facility. Israel's idea is to attract inward investment from top-level technology companies which it is hoped will spawn innovative businesses.
- These incentives have been co-ordinated with an array of other programmes such as a government loan programme for small businesses, a State Guarantee Fund for Encouraging Small Businesses as well as an active technology incubator programme.

For programmes aimed at technology-based companies, a cadre of technologically literate intermediaries is essential. They can ensure an efficient allocation of capital and give value-added to funding recipients. In the case of loan programmes or loan guarantee programmes, governments may find it effective to train bank managers in the appraisal of technology-based firms. In designing any programme aimed at technology-based firms, it must be decided whether particular technologies are to be emphasized.

Profile of country

The most important determinant as to which venture capital support programmes are appropriate is the size and condition of private sector venture capital. The shortcomings of the private sector should help determine the government role and the design of its programmes. Thus, programmes will differ along a spectrum of venture capital supply factors, ranging from the well-developed venture capital market in the United States through the less well-developed markets in Europe and Japan to the nascent markets in Central and Eastern Europe. The role that the state may play in filling funding gaps will also depend on broader economic, social and budgetary factors. The long-term goal of most programmes is to create vibrant private sector venture capital that will reduce the need for government programmes.

Even in well-developed markets such as the United States, there are numerous government venture capital programmes. The SBA 7(a) programme and the SBIR programme represent considerable expenditures to support SMEs and venture capital in the United States (*see Annex and Box 4*). Even though there is a panoply of programmes, particularly when account is taken of incentives at the state level, it can be argued that the US government minimises its involvement in that investment decision-making is left to the private sector. This is possible due to a highly-developed pool of expertise in banking and venture capital and to the framework of sophisticated financial markets. For other countries with less developed SME financing, the lesson is that building a network of skilled intermediaries is essential.

Box 4. The US Small Business Innovative Research (SBIR) Programme

While the characteristics of the *Small Business Innovative Research* (SBIR) programme do not neatly fit it within the typology established for this report since it concerns mission-oriented research and development, some mention may be warranted. The programme was established in 1982 and mandates that all US federal agencies which spend more than \$100 million annually on external research set aside a fixed percentage of these funds for awards to small businesses. Recipients of SBIR awards must be independent, for-profit, US firms with less than 500 employees.

First, the size of the programme is significant. In 1995, the SBIR programme provided almost US\$ 900 million to young technology-based firms. It is estimated that this amount in 1997 will be US\$ 1.1 billion. Since programme inception, 37 000 awards worth over US\$ 5.3 billion have been made. In addition, by awarding money to develop an innovative project, the programme potentially frees up internal funds that the small company would have earmarked for its R&D and perhaps obviates the need for the firm to raise capital elsewhere.

There are three phases to the programme, although funding is only provided for the first two. Phase I awards up to US\$ 100 000 to help winners determine a project's feasibility. About half of Phase I winners go on to receive Phase II awards of up to US\$ 750 000 which support development work. Awards are made to companies as contracts or grants. The government does not receive any equity participation.

The venture capital challenges confronting the countries of Central and Eastern Europe are significantly greater than those in most OECD countries. These countries have a top-heavy business structure and relatively few small and medium-sized enterprises. The banking systems and capital markets are not sophisticated and there is often an underdeveloped business culture. Their regulatory, accounting and fiscal systems are undergoing significant changes. Furthermore, these countries have budget constraints which make funding for support programmes difficult. Yet, smaller and medium-sized firms should become the basis of their economies with the larger or maturer businesses being fundamentally restructured. Starting and developing medium-sized and privatised companies will need long-term risk finance. At present, such finance is in short supply, and few investment companies are being created to invest in them for the long-term. However, these governments are now taking steps to rectify such problems; for example, Hungary has enacted a new law to expand venture capital supply.

At least in the interim period, countries in transition may obtain funding from international organisations such as the *European Bank for Reconstruction and Development* (EBRD), the Eurasia Foundation, and the Enterprise Funds. The European Union's *PHARE* programme provides early-stage funding for Central and Eastern Europe and its *TACIS* programme offers similar funding for the former Soviet Union. Where these countries are trying to attract private funding, this finance may also be sought in emigrant communities in developed countries. For example, an important source of venture capital funding in Poland has been the *Polish American Enterprise Fund*. The money such investment represents is clearly welcome, but additionally it may bring along know-how valuable for building the business community and raise the standards of the financial system. Foreign banks or organisations that are providing lending in this region state that training and building capacity with their local partner is the single most important factor that determines the success or failure of these lending programmes.

DIRECT SUPPLY OF VENTURE CAPITAL

Government equity investments

Direct equity investments by public authorities are the most high-profile way of injecting venture capital into an economy. One type of programme is where the government invests in private sector venture capital firms, who in turn provide funding to companies. Alternatively, a government may create its own venture capital fund(s) which provide(s) equity to firms. Some government-created venture capital funds receive part of their funding from the private sector and are referred to as *hybrid funds*. In general, equity programmes are intended to address problems of insufficient liquidity available for particular classes of investment. These government equity investments are often targeted to helping firms in the seed and start-up stages where the risk profile is too high to attract private capital. They may also be targeted to supporting technology-based firms whose longer-term potential may be inadequately valued by the private sector. Factors which should be considered in designing equity programmes, including the appropriate role of government managers, are given in **Box 5**.

Box 5. Factors in design of government equity investments

Target equity gaps – The two types of venture capital investment that most typically have problems raising equity are early-stage and technology-based firms or funds. These are the sectors to which government equity investment should be directed.

Fund size – Much of a fund's cost is fixed and thus represents significant overhead for small funds. Since funds should aim to eventually achieve commercial returns, government funds should have sufficient size that they are not overly handicapped by costs.

Fund management – Public officials should not be directly involved in the investment process. Rather, this responsibility should be delegated to top-quality venture capitalists from the private sector. While the government should monitor programmes, its involvement in investment decisions should be minimal and the decision-making mechanism should be transparent.

Management support – Government venture capital funds, just as their privately owned counterparts, should supply investee companies with more than just money; portfolio companies should receive value-added advice regarding management, strategy and finance.

Additionality – A programme goal should be to attract new private sector investment and create a commercially viable market. Programmes should seek to maximise private sector participation; to achieve this, government funds may be offered on a matching basis. Of course, this approach assumes there is a degree of liquidity in the market.

Effect on private sector – An increased volume of funds may represent excess money and drive returns down to unacceptable levels. Care must be taken not to drive private investors from the market. The quantity of attractive projects should be monitored and steps should be taken to increase the supply of viable proposals.

Duration – Government equity investment should be used as a *pump-priming exercise*. As private sector involvement in a segment grows, the government should phase out its programmes.

Government loans

Governments may establish programmes that provide debt financing to venture capital firms and technology-based small firms. Often, this lending is totally additive, in that it provides financing which would be unavailable from other sources. In other cases, where private sector credit is available, government loans may be offered on more attractive terms. Among such improved terms may be: 1) *preferential rates of interest* – the difference from the rate the market would charge is essentially a subsidy; 2) *extended duration loans* – where there is a debt servicing schedule tailored to the capital constraints of early stage companies; and 3) *non-refundable debt* in case of borrower failure. A drawback of loan programmes is that exposure to default can vary cyclically and unpredictably and may place a strain on national budgets. Factors which should be considered in designing government loan programmes, including those pertaining to interest rates, debt service and failure rates, are given in **Box 6**.

Box 6. Factors in design of government loans

Debt service capability – Early-stage companies often have a negative (or at best, modestly positive) cash flow and so will be unable to pay interest or make principal repayments until a later stage. This must be considered in constructing a debt service schedule. A deferred repayment schedule is often appropriate.

Financing share – Most programmes set a limit as to the percentage of a company's debt they will provide. This is done so that the enterprise itself retains a sufficient degree of the risk. Some countries maintain that the public sector should never provide more than 75 per cent of financing for a small firm.

Private sector expertise – It is important to train bankers to properly evaluate the potential of technology-based companies. The capability of bankers to understand and appraise these companies varies greatly among countries. Government loan programmes can include training of bankers as one of its activities.

Interest rates – If the rate on government loans is well below the market rate charged by banks for this class of lending, the programme may not truly create additional funding within the system, but may merely redirect small companies to borrow from the public rather than the private sector.

Private sector leverage – Government loans may require that, concomitant with their debt investment, new private equity be invested.

Failure rate – Government loan programmes might include risks that are not acceptable to commercial banks. If a programme has a negligible default rate, this suggests the government is providing little additionality. At the same time, very high failure rates can become unacceptably expensive and undermine the programme.

FINANCIAL INCENTIVES

In an attempt to channel what is assumed to be sufficient liquidity into targeted areas, e.g. innovation, start-up, expansion, young and/or small firms, unquoted enterprises or any other defined market segment, governments may offer financial incentives. One form is tax incentives aimed at investors, venture capital funds, fund managers and/or the investee companies. Financial incentives may also take the form of guarantee schemes that cover debt or equity financings. Tax incentives channel resources towards an investment by *lowering the costs* involved. Guarantee schemes channel resources towards an investment by *lowering the risks* involved.

Tax incentives

Many governments choose tax incentives, particularly investor tax credits, as a means of stimulating particular types of investment. Tax incentives assume that enough liquidity exists in the system which these incentives seek to channel towards particular investments. Incentives may be available for investments made directly in qualifying small companies or may be available for investments made in qualified pooled vehicles. An important decision in programme design is whether the tax incentive should be given on the front-end (i.e. on the amount invested) or at the back-end, which is tied to any capital gains realised at exit. The first rewards all investors, whereas the second rewards only winners; thus a front-end incentive programme may be more expensive. Another difference between the two approaches is that front-end incentives may cause behaviour motivated primarily by tax shelter considerations. These are among the factors to be considered in the design of government tax incentive programmes as shown in **Box 7**.

Box 7. Factors in design of tax incentives

Form of incentive – Tax relief may be based on the amount invested (these are *front-end incentives*) or on realised capital gains (these are *back-end incentives*). Front-end incentives can cause behaviour motivated by tax shelter considerations. Back-end incentives only reward successful investments; thus, a programme based on them may be less expensive. A mixed model of tax incentives may be feasible.

Extent of incentive – It must be decided whether such programmes should provide positive incentives to investors in private equity or simply ensure that these investors' returns are no less advantageous to returns received from other forms of investment.

Rate of return – The size incentive to give investors must be determined. This depends on both the rate of tax relief and the maximum amount of investment eligible.

Time-frame – Investors must be allowed sufficient time to gain an awareness and avail themselves of the incentives. Once funding flows to pooled vehicles, the period for tax relief eligibility must allow sufficient time to invest this capital properly. If an investment manager makes overly hasty decisions, the risk of poor choices increases.

Cost of the programme – Tax receipts lost due to a programme's incentives should be compared with additional tax receipts resulting from new businesses formed as a result of the programme.

Targeting – Incentives may be restricted to investments as qualified by sector, stage or amount. In particular, they may be linked to investments in what may be otherwise neglected sectors, such as early-stage and technology-based businesses. Accurate targeting is critical. Otherwise, there is the very real possibility that the plan will be subverted. On the other hand, too many restrictions will reduce the programmes' attractiveness to investors and add excessive bureaucracy.

Type of investment – It must be decided whether incentives should apply to pooled investment vehicles or direct investments. It is generally believed that direct investments may attract more active investors who may provide SMEs with added value, such as management advice.

Effect on investment market – It must be considered whether a tax incentive programme distorts the market. Investors in schemes benefiting from tax incentives can, as a result of such benefits, accept a lower – or possibly even negative – pre-tax return. This may represent “*unfair*” competition with private venture capital which could eventually drive private sector funds from the market.

Eligibility – Young companies often rely heavily on investments by their management. Yet several incentive plans exclude management to participate in the programme. Programmes should consider whether such an incentive should be given to management.

Loan guarantees

The great majority of OECD countries offer some form of government-backed guarantee covering loans to small firms. Under such a programme, the government guarantees a percentage of a qualified loan made by a financial institution. In the event of borrower default, the loss incurred by the lender is only for that amount of the loan not covered by the guarantee. The intent of these programmes is to encourage financial institutions, particularly commercial banks, to fund small firms which have viable projects but which cannot meet collateral requirements. The government guarantee, by providing a floor on how much the lender can lose, serves as a substitute for collateral.

In some countries, loan guarantee programmes are financed by the government but operated with delegated authority by the commercial banks (e.g. United Kingdom, United States and Canada). In other countries, programmes are funded by trade associations and financial institutions on a local basis and these funds are in turn guaranteed by government (e.g. Germany, France and Japan). It is not the aim of loan guarantee programmes to have lenders merely apply the coverage to lending which would have been

made even without the programme. Rather, the goal of programmes is additionality, which is finance which would not otherwise have been available.

To compensate for expected losses from loan guarantee programmes, the state is paid a premium, which generally ranges between 0 and 2.0 per cent (*see* **Box 8**). Because of the premium, loans covered by a guarantee charge the borrower a higher total interest rate than that paid under normal arrangements. The maximum percentage of loan coverage varies by country as does the premium charged. While there is not a perfect correlation, programmes guaranteeing a large percentage of the loan would be expected to charge a greater interest premium than that demanded where the extent of coverage is more modest. The cost to the state are losses due to default and premiums charged for the guarantee serve as an offset. Losses have run in the range of 20 per cent for the United Kingdom scheme and 10 per cent for the French scheme (*see* **Annex**). General factors to be considered in the design of government loan guarantee programmes are given in **Box 9**.

Box 8. Examples of loan guarantee terms

COUNTRY	PROGRAMME	% OF LOAN GUARANTEED	INTEREST RATE PREMIUM
UNITED STATES	7(a) Loan Guarantee	75	none [2% origination fee]
FRANCE	SOFARIS	50 to 70	0.6
UNITED KINGDOM	Loan Guarantee Scheme	85 if company > 2 years old 70 if company < 2 years old	0.5 fixed, 1.5 variable
CANADA	SBLA	85	1.75
PORTUGAL	SPGM	70	1.5
JAPAN	VEC Loan Guarantees	80	2.0

Box 9. Factors in design of loan guarantees

Risk sharing – It must be determined what is the maximum percentage of a total loan the government will guarantee. In order for investments from the private sector to function properly, it is important that these investments have some risk attached. The most frequent percentages guaranteed by governments are 50 per cent or 75 per cent. If a government guarantees too great a percentage, lenders may provide loans at an inappropriately low rate as there will be minimal risk attached. Another effect could be that lenders may not do sufficient due diligence on borrowers.

Types of loans – The types of loan to be guaranteed must be chosen – working capital, fixed asset, etc. Almost all countries have programmes that guarantee loans for fixed assets but these do not provide the greatest additionality to commercially available financing. Many countries exclude guarantees for refinancing loans. While some countries exclude guarantees for working capital loans, these provide a much greater degree of additionality.

Fees – Generally, the borrower pays an annual premium on the guaranteed portion of the loan. Some programmes, such as SBA loans in the United States, charge an initial arrangement fee. Premiums should not be so high as to be unacceptable to potential borrowers. In most programmes, the borrower pays the fee to the guarantor. Some countries have instead experimented with the lender paying the fee to the guarantor. Although in this case the lender passes along to the borrower the cost of the fee, this mechanism may keep the lender more focused on the cost of the guarantee.

Personal guarantee/personal stake required – Many countries require that the borrower put up a form of personal guarantee or minimum personal stake. This is done in order to increase the borrower's commitment to keep the business solvent. Some programmes require loan applicants to have relevant professional or trade qualifications.

Project appraisal – The appraisal of the project for the guarantee can, as is most often the case, be done by the lender, or it can be done by independent appraisers or by the guarantor. Separating the appraisal from the lender does, however, inject another layer of bureaucracy, and most probably cost. Most programmes believe it best that private sector lenders, working within the constraints of the programme, choose the companies to receive the guaranteed loan. Their credit granting and loan monitoring expertise usually exceeds that of government officials.

Default rate – There is not yet sufficient data to compare the default rate among different countries' programmes. Since most of the guarantees are for long-term loans, the programme should have been in place at least 12 years in order to generate sufficient data for analysis. A cost-benefit analysis of the programme would compare financial losses associated with defaults vs. such benefits as additional jobs created or additional tax revenues from growth stimulated. Of course, a government can reduce its losses by excluding from the guarantee companies perceived as having higher risk. Restrictions on the programme based on the sector or size of a business may attempt to limit risk. It may also limit demand by raising the premium charged.

Equity guarantees

A few governments have equity guarantee programmes which attempt to overcome the aversion that many investors have towards what are perceived as high-risk investments. In some cases, however, owners of new technology-based firms dislike sharing control of their company with others. Investors often avoid private equity investments because of the high failure rate associated with young and technology-based firms. They require as compensation a very high anticipated return. Venture capital firms typically look for an estimated internal rate of return on prospective investments of 30 to 50 per cent; this allows, after accounting for failures, a targeted portfolio return of 20 to 30 per cent. Most small business plans cannot demonstrate such high returns. The logic behind an equity guarantee programme is that if a portfolio is shielded from much of the cost relating to failures, the target internal rate of return for individual investments can be lowered while at the same time the portfolio can achieve its targeted overall return. These programmes are not yet widespread; a few countries have recently established such schemes (*see Annex*). Factors to be considered in the design of government equity guarantee programmes are given in **Box 10**.

Box 10. Factors in design of equity guarantees

Risk-sharing – The percentage of loss that is covered must be high enough to encourage investments that would otherwise not be made. However, the private sector must bear a significant enough share of the risk as to ensure that they properly screen investments and that they do not give up prematurely on marginal investments.

Additionality – It is difficult to ensure that SME funding covered by the guarantee is additive. Venture capitalists may include in the programme investments that would have received funding even without the guarantee. Measures of this additionality should see whether those investments that would have been made regardless of the programme are in fact higher due to the guarantee.

Programme allocations – If specific annual allocations are made for payment against failures, investment managers may be tempted to shut down a marginal company and ensure a guarantee payment rather than make an additional effort for the company to succeed.

Value-added – Venture capital firms which receive the guarantee should have experience and skill working with small firms. For example, the Danish programme requires that the venture capitalist take a board seat on a guaranteed company.

Pooled or individual investments – Although guarantee programmes based on individual investment entail greater administrative effort and costs than portfolio guarantees, the former have often been viewed as not leaving the state sufficient control over its risk exposure.

INVESTOR REGULATIONS

Governments can determine the types of investor eligible to fund venture capital or to provide direct financing to SMEs. Specifically, some countries may block pension funds or insurance companies from venture capital investments. Even when not prohibited, such investments may be discouraged. Whether prohibited or discouraged, the logic behind such restrictions is that venture capital investing is too risky for certain classes of investors. While intended as a safeguard against the effects of defaults on smaller investors, these regulations may be excessive and they certainly limit the supply of venture capital funding. Many countries are reviewing regulations governing types of investors eligible to do private equity investing and are considering a loosening of restrictions.

These countries are often inspired by the *United States'* experience of the late 1970s and early 1980s following changes to the *Employment Retirement Income Security Act* (ERISA). Venture capital investing was made permissible for pension funds and a major new financing source was unleashed. An attempt to similarly increase the fund flows to these sectors has occurred in *Australia* where, in 1995, the Reserve Bank changed prudential rules so that banks may now make equity investments in SMEs. Regulatory changes recently made in *Italy* now permit its pension funds to invest in private sector small firms. Perhaps the most dramatic impact of regulatory change was witnessed in *Finland* which encouraged banks and pension funds to invest in venture capital. Following this move, these two groups represented 79 per cent of venture capital raised in 1995 up from 20 per cent in 1994. *Japan* too is considering changes to its pension fund regulations which currently have strict limitations regarding investments in venture capital or asset management companies.

In *Ireland*, legislation had been considered which would have required pension funds to invest a percentage of their assets in venture capital. The government chose instead to issue guidelines for pension funds which, while not requiring venture capital investing, strongly encouraged it. According to these guidelines, in the five years from 1994 to 1999, pension funds should annually invest in venture capital 0.08 per cent of their assets under management. At the end of 1999, venture capital valued at cost would thus represent 0.4 per cent of total pension fund assets. Applying these guidelines, Ireland will funnel an estimated total of Ir£ 150 million of new investment by 1999 into venture capital. Of this, IR£ 100 million has already been placed in venture capital funds which have themselves so far made 18 venture capital investments.

CONCLUSIONS

OECD governments are increasingly initiating programmes to directly stimulate venture capital for innovation and economic growth. Government incentives can attract investors to new, riskier vehicles which result in job and wealth creation that would not otherwise have occurred. Programmes may be targeted at areas which, despite being unable to offer attractive financial returns, are most in need of job creation or hold the greatest innovative potential. Initiatives can remedy deficiencies in financial markets which cause small companies and technology-based firms to be capital-constrained, particularly in countries without active secondary stock markets. Programmes may play a role in mobilising risk capital, and thus have a leveraging effect on private sector activity. In addition to finance, many government programmes provide consultancy advice and links to government services which can help nurture young companies for the longer-term.

However, it must be recognised that, in many cases, direct government programmes are second-best solutions. The best approach is to enhance the macroeconomic and regulatory environment in order to overcome some of the financial obstacles to high-risk investments. In addition, the disadvantages of direct government venture capital measures must be mentioned. Such schemes, when poorly designed, could lead to inappropriate investments at substantial public cost. Government programmes could subsidise or maintain unviable firms or ventures, which are not attracting private capital because they do not represent good investment opportunities. They may also create distortions if investment decisions are based on non-economic criteria, if schemes change frequently in an unpredictable manner or if national and regional/local programmes considerably overlap.

The above discussion has indicated factors to be taken into account in the design of specific types of venture capital programmes in the attempt to identify “*good practice*”. A good practice is one which is more successful at achieving strategic objectives than are alternative practices. In general, the following principles can guide the use of best practices in government venture capital programmes:

Rationale – The efficacy of venture capital programmes will be tied to the size, character and availability of a country’s private sector venture capital. Government programmes should attempt to address market failures or funding gaps stemming from the inadequacies of the financial system in providing capital to economically-viable projects.

Design – There are a number of design factors specific to each type of venture capital scheme. In all cases, it is important to clearly define and limit the investment targets so as to exclude inappropriate investments. The configuration of schemes must consider the nature and extent of the investment incentives, whether they are aimed at venture capital firms or directly at small firms, the stages of investment to be targeted, the risk factors involved, the comparison to private sector rates of return, the measures for ensuring the competence of intermediaries and the leveraging effects on private capital.

Additionality – Venture capital programmes should seek to stimulate private sector investment and create a commercially viable market. Some of this can result from the leveraging role of a government programme. Government programmes should generally attempt to strengthen the private venture capital sector and be phased out as private markets mature.

Management – A successful programme will elicit private sector participation in the design stage and will look to the private sector to play a professional role in the programme's management. While the government should monitor programmes, its involvement in investment decisions should be minimal.

Process – The process whereby a small firm, investor or venture capital fund applies for an incentive should be simple and straightforward. Among the most frequent criticisms of programmes is that some have unnecessarily elaborate or incomprehensible application procedures and that the award procedure is excessively long.

Transparency – Venture capitalists, investors and firms in need of funding must learn of a programme's existence. An effective way to reach a large part of this population can be through the intermediation of accountants and lawyers. Information about venture capital availability should also be disseminated to other government programmes.

Evaluation – Venture capital programmes should be evaluated and assessed on a regular basis. One criteria for measuring success is the extent to which venture capital funds or small firms are created which can operate on a commercial basis, i.e. generate an attractive rate of return.

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ANNEX: OECD VENTURE CAPITAL PROGRAMMES

Government equity investments

Belgium's Investment Company for Flanders (GIMV), established in 1980, pioneered the concept of government-funded venture capital run by independent private management. GIMV investments, which are primarily equity stakes in technology-based companies, are concentrated in the Flemish region of Belgium. A high-profile success was the GIMV investment in Lernout & Hauspie Speech Products, a maker of speech-recognition software. Founded in 1987, Lernout & Hauspie had a 1995 initial public offering (IPO) in which GIMV realised US\$ 9 million from the sale of 15 per cent of its interest. Total government financing of GIMV since inception has been BF 4.5 billion, and approximately BF 2.0 billion of this amount has come from reinvested dividends or realised capital gains. Originally 100 per cent government-owned, the ownership base of GIMV has broadened as Belgium's venture capital market has matured and become increasingly attractive to private capital. Private ownership of GIMV is now 15 per cent and should soon increase to 25 per cent.

The two other regions of Belgium (Brussels-Capital and Walloon) also have government-funded venture capital funds. These two funds are *Société Régionale d'Investissement de Bruxelles* (SRIB) in the Brussels region and *Société Régionale d'Investissement de Wallon* (SRIW) in the French-speaking region. These each differ from GIMV in two ways: 1) their investments are of a more industrial rather than technology venture capital nature; and 2) their investment policies receive a greater degree of government guidance rather than being autonomously run by the private sector. Although SRIB and SRIW do not emphasise investments in start-up and technology companies, these sectors are not completely ignored. For example, under the aegis of SRIB, public funding of BF 400 million was allocated in 1992 to create a regional fund *Brustart* which is mandated to invest in early stage companies. To date, Brustart has invested about BF 150 million in 30 companies of which eight could be considered technology-based businesses.

The *Netherlands* government has recently created hybrid venture capital companies. As of September 1996, three such funds have been established. The funds are known as PMTSs (*Participation Companies for New Technology-based Firms*), each with a minimum capital of Gld 10 million. Of this amount, approximately Gld 2.5 million is provided by the government as quasi-grant loans; the balance comes from banks, third parties, and, to a small degree, from regional development companies (the government provides about half of the RDC's own funding). A government loan to a PMTS has a five or seven year term, but if, at maturity, the PMTS has invested most of its capital in new technology-based firms and has reinvested any income received, the government will convert the loan to a grant.

Without a doubt, *Small Business Investment Companies* (SBICs), which began in the *United States* in 1958 are the best-known example of a government venture capital initiative. Licensed by the Small Business Administration (SBA), SBICs are privately-managed firms which function as intermediaries between large investors and small enterprises, providing the latter with equity capital. For most of the programme's life, the government provided loans to SBICs; this form of funding is discussed later. In

1992, the *Small Business Equity Enhancement Act* overhauled the programme which now does primarily equity-based financing.

SBICs are hybrid funds, that is, they receive money from both the government and the private sector. For an SBIC with private funding of up to US\$ 15 million, the government will provide 3:1 matching funds. For larger SBICs, the matching ratio decreases; the largest size fund, with US\$ 45 million of private funding, is eligible for 2:1 matching funds. A 2 per cent initiation fee is charged on funds supplied by the government. The government's equity investment is in the form of a participating preferred security. This investment accrues dividends and participates in the long-term profits of the SBIC. Interest payments are deferred and their rate approximates that on 10-year treasury notes at the time of issue. The shift of SBIC funding to equity has an important effect: SBIC investing no longer creates, as it did in the past, a tax liability for normally exempt institutional investors, such as pension funds and endowments; this is significant as pension funds have become the largest US source of venture capital. A significant change of the 1992 revisions of the SBIC programme is that the US government, through the SBA, is now permitted to take the role of a limited partner when leveraging privately managed SBICs. In this way, the government can take an economic participation in the programme's risks and benefits.

In 1995, the SBA programme provided an estimated US\$ 1.5 billion of financing. From April 1994, when the 1992 *Small Business Equity Enhancement Act* went into effect, through August 1996, there were 71 new SBICs with US\$ 945 million in private equity capital licensed, which amounted to more new SBIC private capital than had been invested in the preceding 15 years. As of August 1996, there were an additional 64 pending SBIC applications representing approximately US\$ 889 million of potential additional private capital. The FY'97 US government budget appropriates US\$ 35.5 million for the SBIC programme. This will provide US\$ 623 million in leverage and an estimated total private/public SBIC programme of over US\$ 1 billion. For every US\$ 1 appropriated, approximately US\$ 28 will be invested in small US businesses.

The United States' SBIC programme has elicited a high degree of interest from other countries, several of which are reviewing whether to launch a similar programme. *Australia* is in the process of implementing such a programme called the *Innovation Investment Fund*, modelled to some degree on the SBIC programme. The programme aims to establish up to six venture capital funds with total Commonwealth funding of A\$ 130 million provided on a 2:1 basis with private capital. The venture capital funds will be managed by private sector fund managers and make investments in small businesses involved in the commercialisation of research and development activities.

In *Germany*, the *Beteiligungskapital für Junge Technologieunternehmen* (BJTU) programme, which ran from 1989-1995, included a "co-investment scheme" run by the Technologie-Beteiligungs-Gesellschaft (TBG) (Technology Investment Company), a subsidiary of the government bank Deutsche Ausgleichsbank. The TBG invested passively a matching amount of up to DM 1 million alongside a venture capitalist. For a period of three years, two options were available to the private investor. His investment could be sold to the TBG with a deduction of 40 per cent of the total amount. Alternatively, the TBG participation could be bought at a premium of about 25 per cent. In essence, this co-investment form gave the investor a put option to sell his investment for at least 40 per cent, and a call option to buy the TBG investment for a 25 per cent premium.

The failure rate of companies financed by the programme has thus far been low; as of mid-1995 it was 17 per cent. It is a subject of debate whether this low failure rate may reflect an overly cautious approach; the government may be too concerned with only picking winners, with the result that many inventions do not make it to market. The programme is able to cite successes such as smart-card reader SCM Microsystems where TBG matching funds of DM 3 million enabled an expansion into the United States in

1994. Thanks to this, the US operations of SCM represented 51 per cent of revenues by 1996. It is generally agreed that due to its generous terms, the BJTU programme has helped create successful companies. Despite this overall positive assessment, the scheme was, nonetheless, criticised for its lengthy and complex application procedure where approvals could take up to a year.

Germany created a successor to the BJTU co-investment scheme: the *Beteiligungskapital für Kleine Technologieunternehmen* (BTU) (Venture Capital for Small High Technology Firms) to run from March 1995 through December 2000. BTU provides funds to firms with a distinctly new product or service, which are less than 10 years old, which have up to 50 employees, and which have up to DM 10 million of annual turnover (for East German states these last two limits are 250 employees and DM 40 million turnover). The maximum amount of government financing is DM 3 million and may be for up to 10 years; a prerequisite is that another investor must commit at least the same amount of equity. Similar to the BJTU scheme, the TBG interest may be bought out at any time for a 30 per cent premium. The equity guarantee aspect of the scheme now covers up to 50 per cent of the private investor's capital (up to 70 per cent in the East German States) and is for the first five years of investment.

In 1992, *Sweden* allocated Skr 6.5 billion for investing in risk capital. Out of this, *Atle* and *Bure*, two publicly-traded funds, of which the state maintains a large ownership, were formed, each with capital of Skr 2.2 billion. To each of six venture-capital firms, whose purpose was to invest in small developing companies, Skr 0.4 billion was also allocated; these venture capital firms are listed on the stock exchange. Both *Atle* and *Bure* were given mandates to invest in venture capital firms as well as directly in young, operating firms. A drawback to being publicly traded has been that it reduces the propensity of these funds to assume the high risks associated with investing in start-ups. Instead of being a source of true venture capital, these funds invest in developed companies - albeit those with development potential. As a result of *Atle* and *Bure*'s low risk profiles, the government has recently announced that it will be withdrawing its support.

During 1994, *Finland* established a 100 per cent state-owned venture capital fund, *Suomen Teollisuussijoitus Oy* (TESI) (Finnish Industry Investment), to be primarily funded by proceeds realised from the privatisation of state-owned companies. TESI will operate as a *fund-of-funds*, i.e. it will invest in venture capital funds which must have a majority private ownership. A fund-of funds approach, rather than a single direct investment vehicle, was chosen to ensure significant stage and risk diversification and to allow some realisations to be made within a relatively short time-frame. The original funding of TESI is Mk 320 million (US\$ 67 million), and 1996 added another Mk 80 million from two privatisations. It is expected some TESI capital will later be provided by the private sector, although the state plans to maintain a majority ownership in the venture capital funds in which TESI invests.

In addition to TESI, Finland has a network of regional venture capital funds run by *SITRA* (Finnish National Fund for Research and Development) and *Kera LTD.*, both of which are publicly-owned. Both *SITRA* and *Kera* limit themselves to minority positions in the regional funds. *SITRA*, active in venture capital since the 1980s, concentrates on technology investments. It invests directly in firms and venture capital funds and to date, with its total cost of investments of US\$ 95 million, it equals one-third of all Finnish venture capital. Finland's *Kera* is attached to the Ministry of Trade and Industry and its main activity is risk financing and SME development. Its venture capital fund, the *Start Fund of Kera Oy* (SFK) has initial funding of Mk 205 million and it emphasises early-stage technology company investing. In 1996, SFK raised Mk 120 million mainly from private institutional sources and established two hybrid funds. In light of the significant increase in venture capital funding that TESI, *SITRA* and *Kera* together represent, observers are watching closely to see whether a sufficient supply of viable investments will be available.

Ireland's Forbairt Agency, which is related to the government's Ministry of Enterprise and Employment, has several programmes to stimulate venture capital and the growth of small high-tech companies. One of its programmes is a five-year plan, running from 1994 to 1999, which invests Ir£ 12 million per year in preference shares of non-public SMEs. For each preferred issue, a payment schedule is established which attempts to realistically accommodate to available cash flow. Forbairt looks to make investments in parallel with private investors and also for the entrepreneur to make an investment in his company. Ireland has also been allocated Ir£ 33 million of funding from the EC's European Regional Development Fund (ERDF) for 1994-1999. This will provide 50 per cent of the capital to establish between 6-8 venture capital funds while the remaining 50 per cent will be privately funded. The first fund, dedicated to investing in software, was recently established and has made its first investment.

Canada has government venture funds which address what it perceives as gaps in the market. In 1994, such funds represented 9 per cent of Canada's venture capital funds. Most of these government funds are regional, with one sizeable exception, the *Business Development Bank's* (BDB) venture capital division. This is a government-owned bank dedicated exclusively to small business. The Bank takes direct equity participations in high growth companies and invests in some private venture capital firms as well. It has a *patient capital programme* aimed at knowledge-based businesses that are in their early stages of development. Beyond its role as an equity investor, FBDB provides additional support to high growth firms and venture capitalists. The Bank offers venture loans which provide quasi-equity for expansion for companies with positive cash flow but limited collateral. It also has a *micro business programme* which offers counselling, training, and financing to early stage companies.

In the **European Union**, the *European Investment Fund* (EIF), which has its headquarters in Luxembourg was established in June 1994. Initial authorised capital is ECU 2 billion, of which ECU 1.78 billion has been subscribed: ECU 600 million by the European Commission, ECU 800 million by the European Investment Bank, and ECU 384 million by 76 banks. Towards the end of 1996, the EIF will begin, through specialised intermediaries, to make equity investments in small firms. Most of the ECU 75 million budgeted for equity investments over the next three years will be to high-growth SMEs – those with staff no greater than 500 and net fixed assets of not more than ECU 75 million. The EIF will also provide loan guarantees to financial intermediaries investing in SMEs. Guarantees, which may cover up to 50 per cent of investment cost, can cover loans (senior or subordinated), portfolio credit insurance, mezzanine finance, or securitisation; they are almost always for a portfolio of investments. In its first two years of operations, the focus of EIF has been on providing loan guarantees to large-scale projects, known as *Trans-European Network Projects* (TENS).

Within the European Union budget, there are additional sources of capital available for SMEs. In particular, on average 10 per cent of the *European Regional Development Fund* (ERDF) resources for the 1994-1999 period are devoted to SMEs. This finance is given in the form of non-reimbursable assistance and is channelled through development programmes. An example of such assistance was indicated above: Ireland has received Ir£ 33 million of funding from ERDF which will provide half of the capital to create between 6 and 8 venture capital funds.

Scotland has established *The Scottish Equity Partnership* (SEP), a £25 million hybrid venture capital fund. SEP will be managed by Scottish Enterprise's venture capital division and is to focus on deals of less than £500 000 with an emphasis on early stage and high-technology companies. The 50 per cent of SEP funded by the private sector is guaranteed on commercial terms by the European Investment Fund.

Government loans

In **Denmark**, the Ministry of Business and Industry allocated DKr 2 billion in 1992 to create *VækstFonden* (Business Development Finance). Its principal activity has been loans to SMEs for research and development projects, internationalisation and skills development. Loans can cover up to 50 per cent of a project which can cost between DKr 200 000 and 100 million. As of 30 September 1996, a total of DKr 1.1 billion in financing had been awarded to a total of 633 projects in over 430 companies. Thus, the average loan size is about DKr 2 million. What is notable about the Danish loan programme is the possibility of a sort of “*debt forgiveness*” in case of failure. Repayments of principal and accumulated interest commence once a project has been commercialised and are a royalty based on estimated project impact on the borrower’s revenues. If a project fails, the debt can be re-negotiated (effectively forgiven) and *VækstFonden* then takes over rights to the project; of course, project rights in this case are not really expected to be of much value. As these are high-risk loans, correspondingly high bad debt provisions, equal to 60 per cent of the Fund’s total lending, have been established.

The *Kreditanstalt für Wiederaufbau* (KfW) is a government-owned development bank in **Germany**. It provides longer term loans to small companies at competitive rates. It is a major source of lending though some critics claim that KfW has been overly selective in the companies it supports. It is hoped that a new initiative, the *European Recovery Innovation Programme* (ERP), introduced in March 1996, will be less stringent in its requirements. ERP is run by the Research Ministry and is designed to help technology-based small firms. It makes loans to companies which plan to market an innovative product, process or service in Germany. Borrowers must have revenues of less than DM 40 million and fewer than 250 employees. Loans are for up to 10 years and charge a preferential rate of interest. The maximum amount lent is DM 10 million for a product’s R&D phase and DM 2 million for the initial marketing phase.

Finland, through *Kera* (a state development bank mentioned above), provides financial and advisory support to SMEs. The majority of financings offered by *Kera* are in the form of loans on investment and working capital. As of November 1996, *Kera*’s total loan portfolio was 60 billion FIM. The state covers 50 per cent of *Kera*’s losses and the loan portfolio can thus assume a higher risk profile than would be acceptable to a private sector lender.

In **Sweden**, the government is majority owner of *ALMI Foretagspartner AB*, formed in 1994 out of previously existing Regional Development Funds. *ALMI*’s activity, in addition to offering advice and support services, consists of providing loans to small firms. Its loans to start-ups (*nyforetagarlan*) have a term of 6 to 12 years with 2 interest-free years and no repayments during the first 2-4 years. Loans cover a maximum of 30 per cent of the early-stage firm’s capital requirements; at least 10 per cent of the balance must be provided by the borrower. *ALMI* also offers existing enterprises development loans having a term up to eight years. The interest rate *ALMI* charges on loans is market rate or higher and co-financing from a bank is common. Finally, it should be noted that although *ALMI* avoids equity ownership, it occasionally offers a convertible debenture loan that if not repaid may be converted into shares. *ALMI* has also created a new loan available to female entrepreneurs (*kvinnolan*).

In the **European Union**, an example of a loan programme for venture capital companies was the *European Seed Capital Fund Scheme* (*ESCF*) run by the European Commission’s DG XVI and DG XIII (1988-1995). *ESCF* was a pilot programme which helped finance operational charges which represent a high percentage of costs for seed funds. The *ESCF* backed 23 newly created funds investing in start-up or early-stage businesses. It gave the funds ten year interest-free loans covering 50 per cent of operating costs for five years. The aim was to help seed capital funds in their most challenging period. The total

cost of the pilot programme was ECU 6.9 million for the 23 funds which had raised ECU 52 million. These funds emphasize technology investments and have invested in 285 start-ups.

As mentioned earlier, in 1958, the *United States* created *Small Business Investment Companies* (SBICs) which received tax advantages and were eligible for favourable-rate government loans of up to US\$ 3 for every US\$ 1 invested by its shareholders. From 1959 through the mid-1990s, SBICs provided US\$ 13 billion in long-term debt and equity capital to 78 000 small companies in over 100 000 financings. Despite the fact that SBICs played an important role in the development of SMEs, financing through the 1960s and 1970s firms such as Nike, Cray Research, Intel, Apple Computer, Federal Express, Sun Microsystems and Callaway Golf, there was a flaw in the programme's original form. Namely, to service their highly-leveraged capital structures, SBICs concentrated their investments in later-stage firms which could generate cash flow. This focus, in a sense, defeated an aim of the programme. When, in 1992, this flaw in the programme was redressed, three other shortcomings were at the same time identified and remedied: 1) pension funds had been effectively prohibited from investing in SBICs since to do so would incur a tax-liability for unrelated business taxable income (UBTI); 2) the limit of US\$ 35 million of government backed funding was too restrictive; and 3) there had been no assurance that SBICs possessed a sufficient level of competence. The programme was overhauled in 1992 and has since become primarily equity-based.

Since 1954, the *Netherlands* has had the *Technical Development Credits Scheme* (TOK). This programme provides subordinated ten-year loans. Repayment is based on a firm's revenues and in the event of technical or commercial failure the loan is forgiven. Loans in this programme are limited to 40 per cent of total project costs.

Tax incentives

In the *United Kingdom*, there are two complementary schemes: the *Venture Capital Trust* scheme and the *Enterprise Investment Scheme*. These succeeded the *Business Expansion Scheme* (BES) which permitted individuals investing directly in small unquoted companies to claim upfront income tax relief at their marginal rate on the amount invested (up to £40 000 per year). Although the BES attracted billions of pounds of investment money, particularly after it was extended to include investment in certain types of rented residential property, relatively small amounts were invested in the sort of companies originally targeted, with much of the money actually going to property or asset-backed deals. *Ireland* also has a Business Expansion Scheme (BES), introduced in 1984 and still operational and which in many ways resembles the UK BES scheme. Although generally agreed to be more successful than England's BES scheme, it is nonetheless felt that many of the investments made under the scheme have not been made in the type of companies originally envisaged by the programmes' creators, but rather were made in asset-based companies.

The UK *Enterprise Investment Scheme* (EIS), set up in January 1994, gives tax breaks to individuals investing in small unquoted trading companies. These investors receive the following reliefs: 1) income tax relief equal to 20 per cent of their investment (up to £100 000 per year) in newly issued EIS shares which are held for five years; 2) exemption from capital gains tax on disposal of EIS shares held for five years; 3) deferral of tax liability on capital gains reinvested in newly issued EIS shares (up to £100 000 per year); and 4) losses (net to EIS relief) allowable against taxable income if not set against chargeable gains. The EIS is aimed at individuals who wish to make a direct investment in one or more companies. In recognition of the added value that external investors with business experience ("business angels") often provide to start-up firms, EIS reliefs are available to such investors, even if they then become paid directors of the company in which they have invested. Individuals who wish to make EIS investments on

a more collective basis may also do so. The reliefs are available to individuals who, although remaining the beneficial owners of the shares of the range of companies in which they invested, do so through a managed investment fund with a fund manager who invests as nominee. Investments began in 1995 and to date over £100 million has been invested in around 950 companies.

The *Venture Capital Trust* (VCT) scheme was set up by way of the Finance Act of 1995 which obtained Royal Assent in May 1995. A VCT is a type of quoted investment which in turn invests in new shares and securities of companies with gross assets of less than £10 million. Thus, the VCT scheme provides individual investors with an alternative means of investing in small companies through a fully collective investment vehicle, allowing the risk to be spread between a number of investments. The largest investment a VCT can make in any one business is £1 million. VCT investors receive the following significant tax breaks: 1) income tax relief equal to 20 per cent of their investment in newly issued VCT shares which are held for five years; 2) no tax on VCT distributions; 3) exemption from capital gains tax on disposal of VCT shares; and 4) deferral of capital gains tax on investment in newly issued VCT shares. The maximum amount an individual can invest in a VCT is £100 000 per year.

The first VCTs were launched in 1995, and by mid-1997, they had raised over £350 million. Though some trusts raised less money than targeted, the programme in total received more funding than many had predicted. Critics of the programme suggest that the £1 million maximum deal size may prove too restrictive, but the four generous tax reliefs are given to encourage investment in the funding gap, which is broadly perceived to be below £1 million. Another challenge is that 70 per cent of money raised must be invested within three years in “qualifying holdings,” which are newly-issued securities in unquoted companies which have assets of less than £10 million. It is probably true to say that the VCTs have not in the event felt that this was a problem. A recent survey suggested that well over half of the companies financed by the first 12 VCTs had been early stage and expanding businesses and that the remainder had been small management buy-outs and buy-ins. The average investment size was about £0.5 million.

Concern had been voiced by leading British venture capitalists whether some newly formed VCTs were subverting the original intention of the scheme which was to invest in emerging companies. Some low-risk VCTs had been created. These interpreted the rules as broadly as possible to create the safest possible environment while qualifying for tax breaks. These funds typically invested a minimum allowable amount in small company shares, which can be as little as one quarter of the fund. The balance was invested in asset-backed shares. The effect was that money raised by these VCTs would go to firms able to offer security to banks, the very firms which would have had access to funding regardless. The Government announced on 2 July 1997 that it wished to sharpen the focus of the VCT scheme and the EIS to exclude arrangements where a substantial part of the return to investors was guaranteed, or which were backed by property and did not therefore carry the degree of risk which was envisaged when the schemes were introduced. The legislation would take effect, after consultation, from 2 July but would not affect existing VCTs in relation to the investment of money that they had raised before that day. Similarly, individuals who subscribed to EIS shares which were issued before that day would not be affected.

Australia launched the *Management and Investment Companies* (MIC) programme in 1984. MICs were venture capital funds whose investors received an up-front tax deduction for their investment. Unfortunately, many MICs performed poorly and investors soured on these funds. The programme was terminated in 1991 after having raised in total A\$ 374 million. While there were valid criticisms of the MIC programme, it did nonetheless serve to start the venture capital industry in Australia.

In 1992, in an attempt to improve the functioning of the scheme, the government established the *Pooled Development Funds* (PDFs) programme. PDFs are venture capital funds investing in companies with total assets of less than A\$ 50 million. Investors’ dividends, distributions and capital gains in funds registered

as PDFs are tax-exempt. PDFs themselves are taxed at 15 per cent on income they receive from equity investments and at 25 per cent on other income. As of 30 June 1997, 51 PDFs had been registered and had raised a total of A\$ 170 million. Over A\$ 102 million had been invested by PDFs in over 105 investee companies. The cost of the PDF programme has been less than A\$ 1 million per year. Recent examinations of the programme have been reviewing ways to increase pension fund participation.

Canada gives tax incentives to hybrid public/private funds as *Labour-sponsored Venture Capital Corporations* (LSVCCs). These funds are independently managed by labour unions. The first LSVCC, Fonds de Solidarité des Travailleurs de Québec, was created in 1983. By November 1995, there were 18 hybrid funds. Asset growth of LSVCCs has been particularly rapid in the 1990s. At the end of 1995, LSVCCs represented 49 per cent of Canada's C\$ 6 billion of venture capital assets. In that year, hybrid funds raised C\$ 1.2 billion, whereas private funds raised only C\$ 0.3 billion. LSVCCs invest in Canadian SMEs and investments dedicated to early-stage deals represented 34 per cent of their 1995 investments.

The attraction of LSVCCs is that an investor receives a federal tax credit of 15 per cent on up to C\$ 3 500 of investment held for five years. (Until March 1996, these credits were more generous: 20 per cent on C\$ 5 000 held for eight years.) In addition to the federal credit, investors in Ontario and Quebec, which account for the bulk of LSVCC funds, receive a 15 per cent tax credit on these investments (recently reduced from 20 per cent). Lastly, investments in LSVCCs which are sourced from recognised retirement plans entitle investors to a tax deferral (the investment can be deducted from taxable income). In other words, for a middle-tax-bracket individual investing in retirement funds, the initial after-tax cost of the investment could be less than 25 per cent, and for high-tax-bracket the cost could be even lower.

There has been debate whether the programme is in fact overly generous. The 1996 revisions were in reaction to this concern. Private sector funds have criticised government support for the LSVCCs as contributing to unfair competition, in spite of the fact that LSVCCs face a regulatory requirement to invest in SMEs which does not apply to private funds. Finally, a shortcoming of the programme as originally set up is that the pace of LSVCC investment in entrepreneurial firms has not matched the pace at which these funds have raised capital. In part, this was due to unexpectedly rapid growth of capital raised by the programme and to provincial government regulations which constrained the funds' investment activities at first, particularly in the province of Ontario, which accounted for some of the fastest growing funds. An easing of these restrictions, coupled with a requirement to meet investment targets or incur fines, has led to a faster rate of investment. Initial estimates show that, in 1996, LSVCCs invested more money in venture capital than in the previous four years combined.

Beginning in 1996, the **Netherlands** set up a tax compensation scheme entitling individuals or groups which make subordinated loans of at least Gld 5 000 to Dutch companies in existence for less than eight years to an equivalent size tax credit. In the case of individuals, they also are entitled to a tax exemption for interest payments of up to Gld 5 000.

Loan guarantees

The *Loan Guarantee Scheme* (LGS) of the **United Kingdom** began in 1981. This programme is run by the Department of Trade and Industry (DTI). Loans guaranteed by the scheme have a repayment schedule of between two and ten years. Companies in existence for less than two years are eligible for a 70 per cent guarantee on loans up to £100 000; older companies are eligible for an 85 per cent guarantee on loans up to £250 000. For a guarantee of loans less than £30 000, banks do not need approval from the LGS authorities. A feature differentiating LGS from other countries' similar schemes is that it does not require the borrower to have either made an equity investment or pledged his assets for company borrowings. The UK approach is intended to overcome the constraint experienced by potential borrowers who lack assets, but this approach takes the risk that without a personal financial commitment borrowers may have a high default rate.

LGS is run jointly by the Department of Trade and Industry (DTI) and several lending institutions. The borrower pays a premium to DTI in addition to the normal interest he pays to his banks: currently this premium is an annual ½ per cent on fixed rate loans and an annual 1½ per cent on variable rate loans. From the scheme's inception until March 1996, over 50 000 loans, totalling £1.67 billion, were guaranteed. The Bank of England reports that in the 1986-1996 period, 2 514 loans out of a total of 41 000 were awarded to firms operating in the technology sector. The default rate has varied over the life of the programme largely as a reflection of the economy's health. The default rate on loans guaranteed in 1995 was 22 per cent.

In the **United States**, since 1953, the Small Business Administration has, run the *7(a) Guaranteed Business Loan Program*. This scheme, which represents more than 90 per cent of the SBA's total loan effort, guarantees long-term loans to start-up and high-potential companies. A 7(a) loan is made by a private lender to small businesses that cannot obtain credit without an SBA guarantee. These loans are then guaranteed by the SBA for up to 75 per cent of the amount provided by the commercial lender. Interest rates are negotiated between the borrower and the lending bank. The maximum amount currently guaranteed by the SBA is US\$ 500 000, though the average loan amount is considerably less. The lender must pay the SBA an initial fee of 2 per cent for the guarantee; this fee is seen as a way of shielding the SBA from banks guaranteeing loans that would have received funding without SBA help. Unlike the guarantee programmes of many other countries, in the United States the borrower does not pay an annual fee to the government guarantor.

Between 1980 and 1991, the SBA guaranteed US\$ 31 billion in loans through the 7(a) programme, and is expected to guarantee US\$ 8 billion of lending in fiscal year 1997. This is out of total guarantees by the SBA of approximately US\$ 10 billion. The default rate for the 7(a) programme was 17 per cent on the loans guaranteed in fiscal year 1996. This rate has varied over the life of the programme – in fiscal year 1984 it was 25 per cent and then declined to 9.5 per cent in 1993. The SBA's second-largest guarantee programme, the *504 Loan Program*, is about one-fifth the size of the 7(a) programme; the 504 programme guarantees loans to small businesses for purchasing or improving buildings and equipment. While there have been criticisms from Congress that the current default rate is much higher than forecast and will require funding beyond what has been allocated to the programme, the SBA claims success for its loan guarantee schemes. It cites a 1992 study by Price Waterhouse which found that *“the SBA-backed companies showed a higher survival rate than the nonrecipients. Four years after receiving the loans, more than three-quarters of the SBA loan recipients were still in business, versus fewer than two-thirds of the comparison group.”*

An important aspect of the US loan guarantee schemes is that loan maturities are long, both relative to commercial loans available to SMEs and in comparison to similar loan programmes in other countries. SBA working capital loans generally have maturities of five to seven years, while the maximum for loans used to finance fixed assets is 25 years. Another differentiating feature of US loan guarantee programmes is that since 1978, banks have been permitted to sell in the secondary market the guaranteed portion of SBA loans. Buyers are investors such as insurance companies. Loans are either sold individually or in pools and their rate is not tied automatically to the original interest rate; instead, because of the SBA guarantee, banks selling such loans typically earn a 1-2 per cent spread, as the buyer accepts an interest rate commensurate with the low risk of this instrument. Banks using the secondary market gain income and liquidity which enables them in turn to offer further lending to small businesses.

In addition to its BJTU's equity co-investment scheme discussed earlier, **Germany** had, from 1989 to 1994, a venture capital loan guarantee scheme – the “*refinancing form*” of BJTU. Kreditanstalt für Wiederaufbau (KfW), the German government agency for economic redevelopment, was in charge of this programme which gave venture capitalists interest-free refinancing loans which came with a 90 per cent guarantee; a loan was for up to DM 1 million, and was for up to 10 years. The KfW, in return, received 40 per cent of any income from the investment. In other words, the venture capitalist risked 10 per cent of the investment in return for 60 per cent of the income.

In **France**, the *Société Française de Garantie des Financements des Petites et Moyennes Entreprises* (SOFARIS), created at the end of 1982, is the main loan guarantor agency. It is owned 42 per cent by the French government; the balance is owned by French financial institutions and insurance companies. SOFARIS guarantees up to 50 per cent of bank and venture capital financings of SMEs. Financings covered include 2 to 15-year loans, leasing agreements, and venture capital companies financing. In the case of business start-ups, the guarantee may go up to 70 per cent. SOFARIS charges 0.6 per cent per annum, but for guarantees to venture capital firms, the rate is 0.3 per cent and a share of capital gains. The maximum guarantee per company is FF 5 million (except for guarantees of ownership transfer or qualified investment programmes - here the limit is FF 10 million.) About 80 per cent of SOFARIS interventions are to companies with annual revenues between FF 10 and FF 100 million. In 1995, the programme supported 1 514 SMEs by providing FF 1.8 billion of guarantees. State funding for SOFARIS in 1996 is budgeted as FF 600 million. The activities of SOFARIS and of *Crédit d'Équipement des Petites et Moyennes Entreprises* (CEPME) – a state-controlled bank which finances SMEs – have recently been combined in a *Banque du Développement*.

Since 1961, **Canada** has had the SBLA Loan Guarantee Programme. The programme gives lenders a 90 per cent guarantee on small business loans. The premium charged is 1.75 per cent. The scope of the programme is large – borrowings by almost all small businesses are eligible, provided the revenues are less than C\$ 5 million.

As noted earlier, loan guarantees are the most widely-used government initiative. An inventory of all these programmes is not possible here. But to indicate a few further examples: **Sweden's ALMI** offers credit guarantees for both newly-formed firms and for existing enterprises. In 1995, **Portugal** set up a company *SPGM* which guarantees up to 70 per cent of an SME bank loan for a 1.5 per cent commission. SPGM initial funding was Esc 5.0 billion (ECU 25.6 million); half from the European Commission and half from two Portuguese venture capital companies. **Finland** has an SME loan guarantee programme which serves over 1 900 small companies and has commitments of US\$ 305 million. **Japan's Venture Enterprise Center** (VEC), which is part of the Ministry of International Trade and Industry (MITI), has since 1974 supplied R&D-oriented SMEs with eight-year loan guarantees for a maximum of 80 per cent up to Y 100 million. VEC charges a 2 per cent annual fee. The **Netherlands** offers guarantees under the SME

Credit Guarantee decree (BBMKB); this programme will guarantee up to two-thirds of loans to innovative growth companies.

Equity guarantees

One of the longest running equity guarantee programmes was in the *Netherlands* – the *Private Participation Guarantee Order Scheme* (PPM) established in 1981. Aimed at private funds investing in early-stage companies, it provided for the government to cover 50 per cent of any losses that might arise on approved venture capital investments up to a maximum of Gld 4 million. By the end of 1994, a total of Gld 901 million had been invested in total through this programme in over 900 companies. But by then, it represented a diminishing percentage of the Netherlands' venture capital investments. In the final year of the programme, only 10 per cent of all venture capital of the size eligible for the programme actually used these guarantees. This figure had been 40 per cent in the early years of the programme. It was decided in 1995 that the venture capital industry had matured to a point where that the PPM programme was no longer needed and it was thus stopped.

In *Denmark*, the Ministry of Business and Industry in 1994 introduced an equity guarantee programme, *Udviklingselskaber*. This provides venture capital companies with partial guarantees against losses on investments and is similar to the PPM scheme of the Netherlands. The guarantees cover 50 per cent of realised losses stemming from investments in companies with fewer than 250 employees and assets of under DKr 50 million (7.42 DKr = 1 ECU). Individual venture firms can obtain a guarantee of up to Dkr 50 million. During its initial two-years, DKr 1 billion was allocated to the programme and DKr 815 million was put at the disposal of 13 venture funds. By mid-year 1997, these venture funds had in turn invested DKr 400 million of the guarantees in approximately 100 firms. In 1997, the programme was renewed for another two years after a vote in Parliament.

In *Finland*, the *Finnish Guarantee Board* (FGB) created an equity investment guarantee scheme in August 1994 aimed at stimulating venture capital. This has the capacity to provide guarantees totalling Mk 500 million for some 100 investments over a two-year period. The number of recipients thus far is 17 and the amount covered is US\$ 10 million. A guarantee covers up to 50 per cent of total or partial losses and usually covers investments for three to seven years. The FGB charges an annual fee of between 2.5 and 4.0 per cent of the amount covered and may require a participation of up to 30 per cent of the net gains realised from the investment.

In addition to new support for venture funds set up at the regional level, *Austria* has recently created a technology equity guarantee programme, *Finanzierungsgarantie-Gesellschaft* (FGG) which is 100 per cent backed by the State. Austria had only one active venture capital fund, and FGG is part of an effort to create a more active venture capital industry. Guarantee facilities totalling Sch 2 billion have been established and are of two types. One is a risk-sharing guarantee offered to venture capital companies. The other is a financing guarantee for young technology companies. The risk-sharing guarantee gives funds a five-year option to sell 50 per cent of an investment to FGG at cost. The financing guarantee is equivalent in scope to the risk-sharing guarantee and has a term of 12 years.

EXCHANGE RATES FOR CURRENCIES REFERRED TO IN THE REPORT

Currency units per ECU	
Australia	1.44
Austria	13.7
Belgium	40.3
Canada	1.58
Denmark	7.43
Finland	5.71
France	6.58
Germany	1.95
Ireland	0.82
Japan	143
Netherlands	2.20
Portugal	195.9
Sweden	8.84
United Kingdom	0.69
United States	1.13

as of 30 April 1997