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**VENTURE CAPITAL POLICY REVIEW: NORWAY****Günseli Baygan**

Abstract

The Norwegian venture capital market is oriented towards expansion investments in traditional sectors and suffers from a lack of private risk capital as well as of entrepreneurial demand. Norway needs to increase the entry of innovative start-ups in order to diversify the economy beyond its resource-based sectors. In addition to reducing its dominant role in providing venture capital through privatisation of *SND Invest*, the government should further privatise industrial holdings, reduce quantitative restrictions on institutional investors, and remove the wealth tax which deters venture investing. This paper analyses trends in Norwegian venture capital markets and makes policy recommendations which have been developed through an OECD peer review process.

**EXAMEN DES POLITIQUES DE CAPITAL-RISQUE : NORVEGE****Günseli Baygan**

Résumé

Le marché norvégien du capital-risque est essentiellement axé sur les investissements au stade du développement dans les secteurs traditionnels et il souffre d'un manque de financements privés et d'une demande insuffisante de création d'entreprises. Il faudrait que la Norvège multiplie les créations d'entreprises innovantes pour diversifier son économie en élargissant la part des secteurs qui ne sont pas fondés sur les ressources naturelles. Tout en réduisant leur rôle prépondérant dans les apports en capital-risque par le biais d'une privatisation de *SND Invest*, les autorités devraient privatiser de nouveaux holdings industriels, éliminer une partie des restrictions quantitatives imposées aux investisseurs institutionnels et supprimer l'impôt sur la fortune, qui freine l'investissement en capital-risque. Cet article analyse les tendances des marchés de capital-risque en Norvège et présente les recommandations qui ont été formulées à l'issue d'un examen par les pairs réalisé dans le cadre de l'OCDE.

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## ASSESSMENT AND RECOMMENDATIONS

The venture capital market in Norway is of average size relative to other OECD countries, but is oriented towards expansion investments in traditional sectors. More so than many OECD countries, Norway needs to increase the entry of new firms and products in order to diversify the economy beyond its resource-based sectors – energy, hydropower, shipping and shipbuilding, wood products and fish. The Norwegian offshore petroleum sector now accounts for almost a quarter of GDP, but falling oil and gas revenues in the future will need to be offset by other sources of income. Although there is not a general lack of capital in Norway, there appears to be a dearth of competent risk capital as well as of new business ideas and opportunities.

The large government role in the economy, as seen in the sizeable portion of state ownership of enterprises, tends to limit competition and hinder the emergence of new technology-based companies. The government, through its fund *SND Invest*, has been the largest source of equity capital in Norway. In addition to further privatisation of the economy and increased competition in sectors such as telecommunications, Norway should take action to stimulate both demand for risk capital and its supply through private venture markets.

A number of economic, regulatory and fiscal reforms may be required. Investment restrictions on institutional investors, both public and private, should be lightened. The fiscal environment surrounding the accumulation of capital should be improved, including abolition of the wealth tax, to increase the number of entrepreneurs, venture investors and foreign inflows of funds. The government is now reducing its dominant role in the provision of venture capital through privatisation of *SND Invest*, but more could be done to create a venture investment climate in Norway. The effectiveness of regional seed funding schemes should be improved through their consolidation and concentration on start-ups in identified technology clusters. Exit opportunities on secondary stock markets could be enhanced through co-operative efforts with Nordic partners. A summary of progress and recommendations concerning Norwegian venture capital policies is given in **Table 1**.

**Table 1. Progress and recommendations on Norwegian venture capital policies**

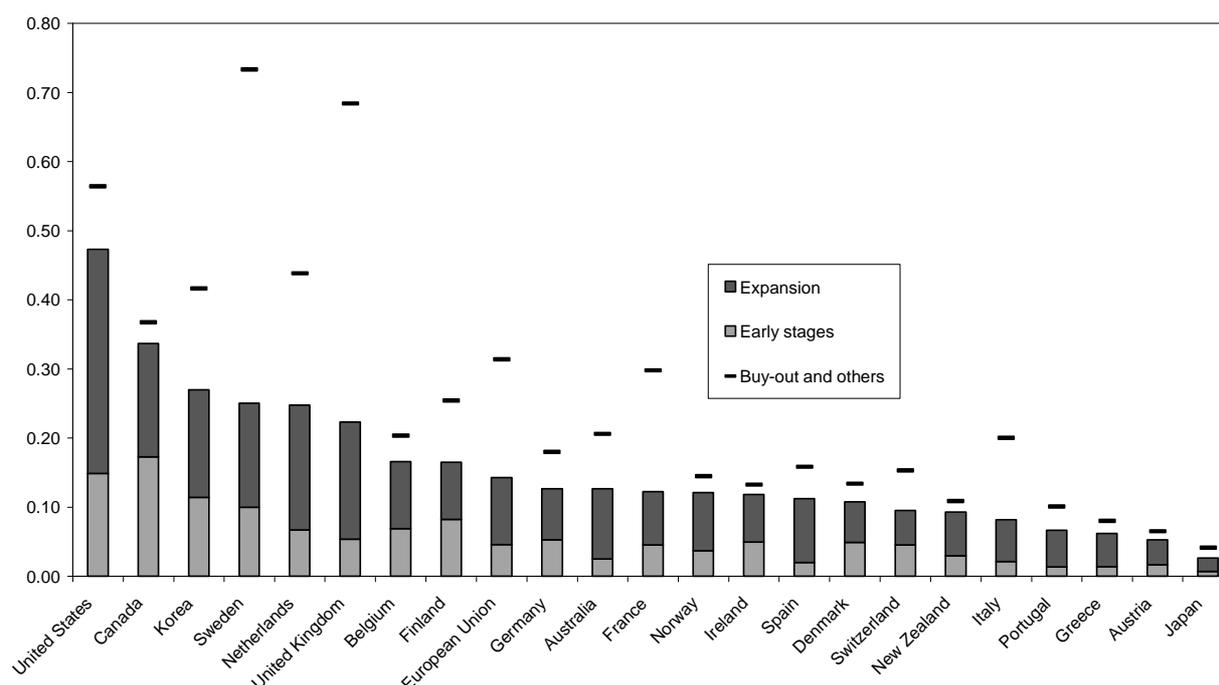
<b>Area</b>	<b>Recent/planned action</b>	<b>Recommendations</b>
<b>Investment regulations</b>	Modifications are proposed to restrictive investment regulations governing insurance companies.	Reduce quantitative restrictions on venture investments by institutions and enhance venture investment expertise among institutional managers.
<b>Tax incentives</b>	Comprehensive tax reform is proposed to change approach to wealth taxation.	Remove wealth tax to stimulate investments by entrepreneurs, business angels and other investors.
<b>Equity programmes</b>	<i>SND Invest</i> scheduled for privatisation; a number of other government funds targeted to specific sectors and regions.	Privatise <i>SND Invest</i> ; merge and focus regional funds on pump-priming private investors in established clusters.
<b>Business angel networks</b>	<i>myVentureLab</i> , <i>Connect Norway</i> , <i>First Tuesday</i> and the <i>Nordic Venture Network</i> working to link entrepreneurs with investors.	Ensure linkages between various business angel networks as well as ties to regional incubators and funds.
<b>Second-tier stock markets</b>	Small secondary exchanges set up by the <i>Oslo Børs</i> and <i>FINFO</i> .	Encourage creation of a single second-tier stock market at Nordic and/or European level.

## TRENDS IN VENTURE CAPITAL MARKETS

### Overview

The Norwegian venture capital market is of average size relative to other OECD countries, although there is limited fund flow to early-stage firms (**Figure 1**). Following sluggish growth in the 1990s, venture capital raised in Norway was approximately NOK4 billion in 2000, of which NOK 2.4 billion was invested. This fell to NOK 2.9 billion and NOK 2.2 billion, respectively, in 2001 and to NOK 2.8 billion raised and NOK 1.5 billion invested in 2002. A survey of members of the Norwegian Venture Capital Association (NVCA) showed a majority of respondents predicted a further decline in 2003 owing to general market downturns, but stabilisation in the following two years (NVCA, 2003). However, both these predictions and venture capital data in Norway should be treated with caution.

**Figure 1. OECD venture capital investment by stages as a share of GDP, 1999-2002**



Note: 1998-2001 for Australia, Japan, Korea and New Zealand. The definition of private equity/venture capital tends to vary by country.

Source: OECD venture capital database, 2003.

NVCA, established in 2001, has approximately 30 members, mostly small private venture funds such as Norsk Vekst, Televenture, Four Seasons VC and Teknoinvest. However, the largest NVCA member is

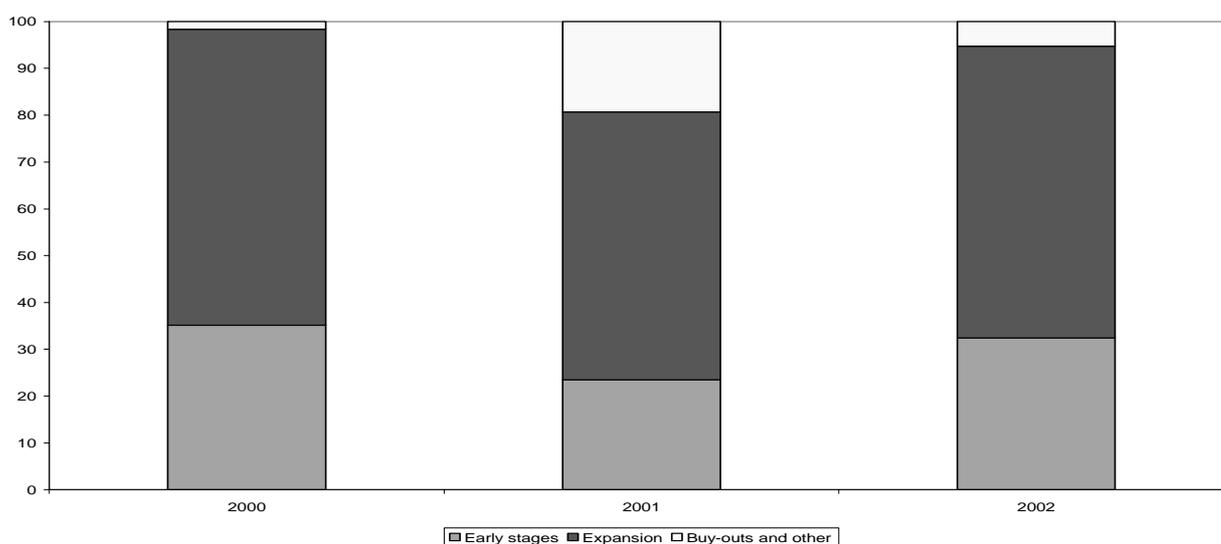
*SND Invest*, the government-owned venture capital fund. The distribution of wealth in Norway is characterised by large public holdings, very small pension, insurance and other financial entities, and low levels of evenly-distributed household wealth. These features partly explain low levels of risk capital in Norway as well as a scarcity of entrepreneurs. Venture investments tend to be limited by a lack of demand in terms of good business ideas and projects to be commercialised. However, the potential for venture investments is considered by some to be several times greater than actual venture activity (Reitan and Sorheim, 2000).

### Investment by stage and deal size

Venture capital investment in Norway is mostly directed towards expansion investments, which accounted for roughly 60% of total capital invested in 2000-2002 (**Figure 2**). Investments in seed and start-up firms and projects made up less than 30% of total venture capital invested during this period. Norwegian business and industry are dominated by small and medium-sized companies with less than 100 employees. Investments are mostly larger deals in middle-stage companies. Financial markets (primarily in Oslo) are working reasonably well for medium-large investments in traditional sectors, but venture markets for earlier-stage firms in other industrial sectors remain less perfect (Arnold and Snowden, 2000).

In contrast to the rest of Europe, only a small share of Norwegian venture capital investment is directed to the later stages of corporate life. In 2000, less than 1% of Norwegian equity investments went to buy-outs compared to 45% for Europe as a whole. Later-stage investment activity – primarily management buy-ins and buy-outs (MBIs/MBOs) - is limited in Norway due to the large number of state-owned enterprises in a range of sectors (*e.g.* Telenor, Statoil). A 2002 White Paper on state ownership proposes privatisation of holdings to increase overall competition and efficiency in the economy. Further privatisation could also introduce more dynamism in the enterprise sector through facilitating exits, for example through mergers and acquisitions (M&As), as well as small firm spin-offs from larger corporations.

**Figure 2. Venture capital investment in Norway by financing stage, 2000-2002**



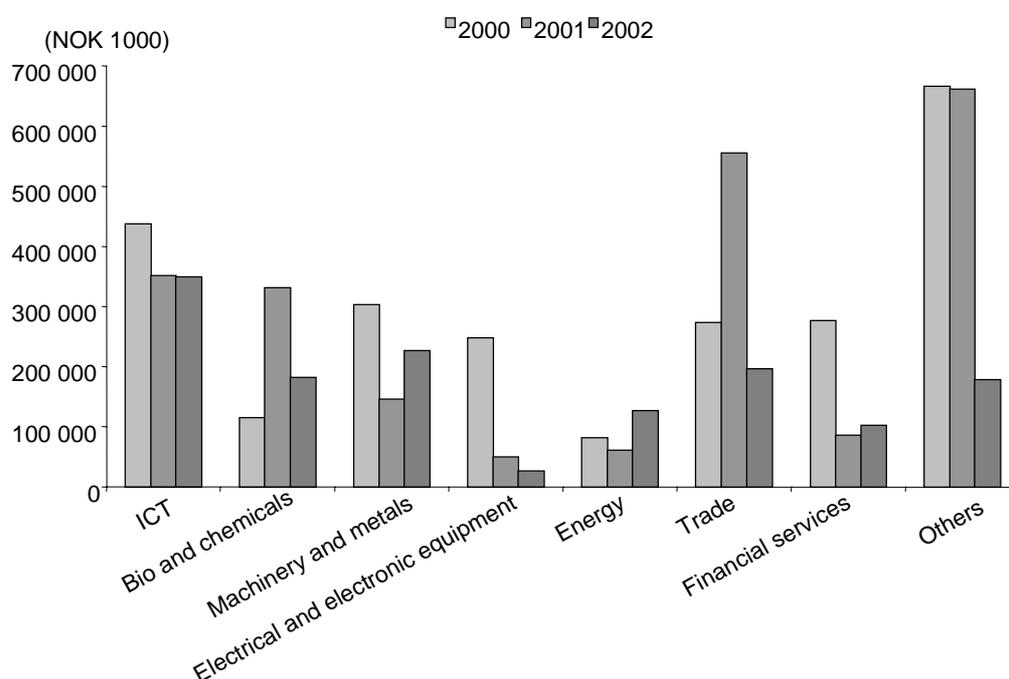
Source: EVCA, 2002; NVCA, 2003.

## Investment by sector

The sectoral distribution of Norwegian venture capital investment reflects its strengths in resource industries as well as an emerging information and communications technology (ICT) sector (**Figure 3**). In general, research and development (R&D) expenditures in the Norwegian business sector remain far below the OECD and Nordic average. Venture investment in the offshore oil sector increased from 3% of the total in 2000 to almost 10% in 2002. There are attempts to link the exploitation of oil reserves in the North Sea to Norwegian research and innovation capabilities, with the result that innovative small firms serving this sector are starting to emerge. A large role is also played by the fish product industry (here classified under “other”), primarily aquaculture, which is considered an important growth sector in Norway. For fisheries, the development of the sonar and echo-sounder were key innovations that increased productivity. However, 2002 saw a serious deterioration of profitability and investment in the fish-farming sector.

Although venture investments as a whole declined during the 2000-2002 period, the ICT sector maintained its share of activity and accounted for 25% of the total invested in 2002. A large share of Norwegian firms are connected to the Internet and the number of Internet hosts per inhabitant is one of the highest in the OECD. But use of electronic commerce is limited and production of ICT-related goods is small, with almost all ICT products imported. There is an emerging ICT centre in Oslo, focusing on mobile Internet and digital content technologies, concentrated in clusters in Goustadbekk Valley, Kjeller Technology Park and the IT Centre of Fornebu. Realising the potential of the ICT sector and increasing the number of ICT start-ups will partly depend on further privatisation of the state-owned telecommunications company, Telenor, to increase competition in telephony and Internet access services.

**Figure 3. Norwegian venture capital investments by sector, 2000-2002**

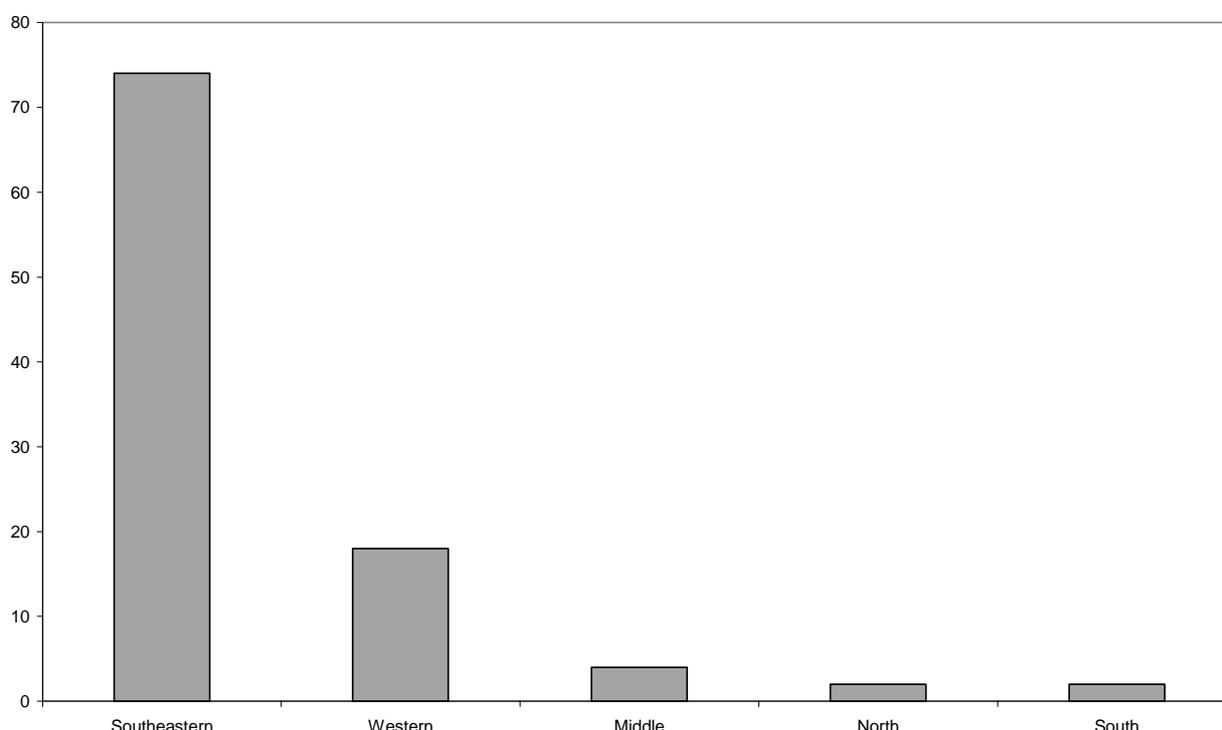


Source: EVCA, 2002, NVCA, 2003.

## Investment by region

Venture capital investment in Norway is concentrated in the south eastern region or Oslo area, which accounted for about three-quarters of deals and 90% of total investment in recent years (**Figure 4**). However, because many Norwegian companies are registered in Oslo but maintain production facilities elsewhere in the country, this may not be a true reflection of the geographical distribution of activities financed by venture capital. The western region (Bergen), which is a centre for marine biology, accounted for 18% of venture investments. The remaining three regions (middle, north and south) each attracted 2%-4% of total portfolio investments. This includes the Trondheim area (middle) which has research centres associated with high-technology investments; Tromsø in the north where the fisheries sector is concentrated; and Stavanger in south western Norway where oil-related industries predominate.

**Figure 4. Norwegian venture capital investments by region, 2000-2002**



Source: EVCA, 2002, NVCA, 2003.

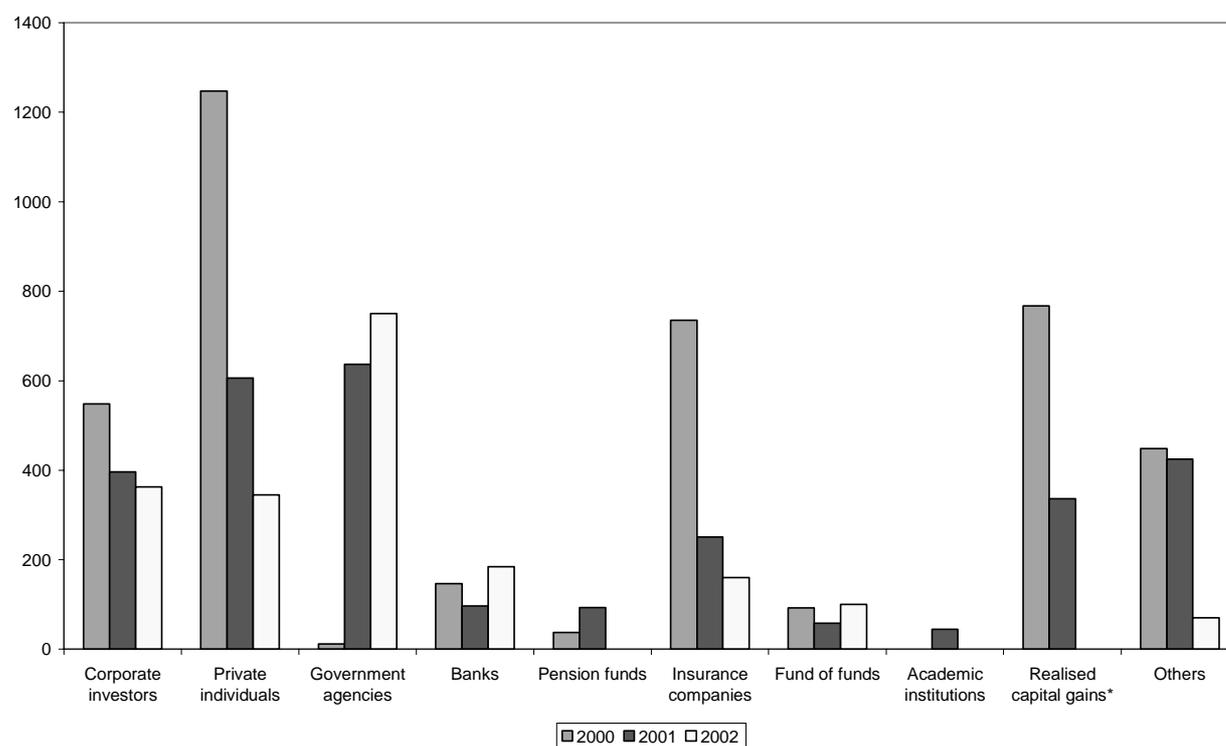
## Funds raised by source

The government is a major source of venture capital in Norway, accounting for 38% of total funds in 2002 (**Figure 5**). Norway has a large public sector relative to GDP which is reflected in the extensive government involvement in the venture capital market. Both the national government and local governments, which account for almost 40% of general expenditures, have commitments to provide high-quality services to all jurisdictions. The public contribution to venture funds reflects national and local inflows as well as European structural funds. The government is now trying to shift activities and the provision of services to the private sector to increase efficiency, including the privatisation of the government venture capital fund, *SND Invest*, perhaps by year-end 2003.

Corporations and individuals have been more limited sources of venture capital in Norway, contributing 19% and 18% respectively in 2002. Corporate venturing is dampened by the lack of large technology-based companies which can provide capital (Jacobsen, 2003). Pension funds and insurance companies have played a negligible role relative to many OECD countries. Pension funds accounted for less than 4% of total venture capital raised in Norway in 2001 and made no investments in 2002. Insurance companies contributed 8% of total venture capital in 2002, down from 23% in 2000. These limited investments are partly due to the small size of private pension and insurance companies relative to public schemes.

International investors do not have a significant presence in the Norwegian venture capital market, due largely to a lack of investment opportunities. They contributed about 6% of funds in recent years, in contrast to Europe as a whole, where approximately 50% of funds raised in the 1997-2001 period were cross-border investments (EVCA, 2002). Most Norwegian venture funds are invested domestically, with approximately 16% of the total going abroad, mostly to the United States (56%) and Sweden (17%). Thus far, Norway has not succeeded in integrating its venture capital activities with international financial markets.

**Figure 5. Norwegian funds raised by source, 2000-2002**



Note: Includes foreign and domestic sources.

Source: EVCA, 2002; NVCA, 2003.

## VENTURE CAPITAL POLICIES AND PROGRAMMES

### Overview

Venture capital investment in start-ups is limited in Norway due largely to a combination of government policies and industrial structure. Extensive government involvement in industry, including significant state ownership of enterprises, as well as a resource-dominated economy have led to a lack of both entrepreneurial opportunities and competent risk capital supply. There are few start-up firms or spin-offs from large corporations, and private venture capital funds remain small and fragmented. However, Norway, more than other countries, needs a thriving entrepreneurial environment and new firms and sectors to assure future development and to maintain the current high standard of living after the depletion of petroleum reserves. Petroleum revenues continue to contribute to a substantial budget surplus, the major part of which is placed in the *National Petroleum Fund*, which is solely invested abroad and subject to restrictions regarding high-risk investments.

Since 1993, the Norwegian government has infused equity capital into the economy and remains the largest source of venture funds through *SND Invest*. The government also provides capital to a number of smaller, regional funds. At the same time, regulations on institutional investors as well as a risk-averse culture act to limit participation by insurance companies and pension funds in venture markets. High tax rates on wealth deter corporations, individuals (business angels) and other actors from making substantial inputs. Second-tier stock markets are small, and market liquidity is poor, limiting exit opportunities. In addition to reducing the government role in the economy and *SND Invest*, reforms on a number of other fronts – regulatory and fiscal – may be needed to stimulate the Norwegian venture capital market.

### Investment regulations

Financial institutions and pension funds manage a substantial share of total assets in Norway, but only a small fraction is allocated to venture investments. Private pension and insurance companies have limited assets relative to the extensive public pension system and National Insurance Fund (*Folketrygdfondet*). Norwegian financial institutions - including banks, pension funds, insurance companies and securities – are also subject to a number of regulations regarding risk-taking and liquidity. In line with European Union (EU) practices, there are specific limits on allowable investments in equity and unlisted shares. Insurance companies may not invest more than 5% of their assets in high-risk placements, and it is recommended that pension funds do not exceed this limit. These institutions are also obliged to hold capital ratios comparable to those recommended for credit institutions and must maintain positive reserves against market and insurance risks. Their inability to incur debt prevents their participation in limited partnerships. These regulations as well as a generally conservative investment culture combine to deter risk-taking by financial institutions and to reduce their role in the Norwegian venture capital arena.

A commission appointed by the government in 2001 to review these regulations has proposed modifications which would allow greater equity participation by institutional investors, particularly insurance companies, and strengthen incentives for risk-taking. In addition, some investment conditions have been revised for the national scheme. The National Insurance Fund, which holds about 15% of its

total assets in Norwegian companies, will be allowed to extend investment to unlisted shares. In order to expand the range of players in the domestic venture market, the government should further modify restrictions on higher-risk investments which can be made by private as well as public sector financial institutions and take steps to develop venture investment expertise and culture among institutional managers.

### **Tax incentives**

Norway has one of the heaviest overall tax burdens – including personal and corporate income taxes and a “wealth tax” on individual assets – in the OECD. The Norwegian taxation system is based on the principle of neutrality between different types of investments and entities. All capital income, including corporate income and short-term and long-term capital gains (corporate and individual), is taxed at 28%. Norway has no fiscal incentives for venture investments. The wealth tax, which is a progressive tax based on net assets, does distinguish between real estate investments and unquoted equity - which are put below market value – vs. bank deposits and listed securities - which are valued at market price. This measure is said to discourage the accumulation of wealth, the emergence of entrepreneurs and the formation of small companies. Foreign investors are taxed on both assets and business income in Norway, with investors from most countries subject to a withholding tax in addition to the 28% capital tax. These features of the Norwegian fiscal system may further act to discourage foreign investors, including in the venture market.

Various reviews have been conducted of the fiscal environment in Norway, with some reforms being enacted. In January 2002, the 11% tax on dividends, which made it less profitable for Norwegians to invest in domestic shares, was removed. Similarly, the 7% investment tax on assets such as vehicles and office equipment was abolished in October 2002. A 2002 White Paper on state ownership recommended a reduction in the net wealth tax and criticised it for biasing the accumulation of wealth towards housing stock and away from other assets such as shares. In February 2003, a commission appointed by the government proposed substantial changes to the tax system, including a review of the relationship between the taxation of labour and capital income as well as the taxation of wealth. Norway should move towards more favourable tax rates on capital, including abolition of the wealth tax, to stimulate entrepreneurs as well as individual and corporate venture investments.

### **Equity programmes**

The Norwegian government has been extensively involved in the venture capital market through the establishment of equity funds targeted to particular sectors and to ensuring equitable access to capital across regions (**Box 1**). The largest single venture investor is *SND Invest*, a state-owned fund managed by the Ministry of Trade and Industry (NHD) but scheduled for privatisation. Although *SND Invest* may in the future be owned and managed by the private sector, the government may continue to contribute equity capital. *Argentum*, which is now being transferred to the NHD, is a state-owned fund-of-funds established in 2001 to develop the venture capital market by identifying and directing investments towards sectors where Norway is believed to have a competitive advantage. The *Industrial Development Corporation of Norway* (SIVA), also run by the NHD, invests in regional and local venture funds.

**Box 1. Government venture capital funds in Norway**

**SND Invest** was established in 1993 as an equity division of the Norwegian Industrial and Regional Development Fund (SND). Its purpose was to provide equity to small firms nationwide in a market then distinguished by shortage of capital and few venture capital companies. SND Invest concentrates investments in strategic growth sectors, including fisheries and sea farming, oil and maritime, environmental management, and travel and tourism. Since its establishment, SND Invest has invested NOK 3.5 billion in more than 300 companies. Maximum deal size allowed is NOK 200 million, while equity interest is limited to 35%. The portfolio of investments in 2002 included 115 companies worth NOK 1.82 billion. Through its subsidiary *Venturefondet AS*, SND Invest also has substantial holdings in five regional venture funds where it co-invests with local governments and private interests.

**Argentum** is a fund-of-funds, previously owned by SND and the *Industrial Development Corporation of Norway* (SIVA), and now to be managed by NHD. This state-owned company was established in 2001 to improve access to risk capital for innovative companies. Argentum manages an asset base amounting to NOK 2.45 billion with an investment time horizon of seven to ten years and equity interest in companies between 33% and 50%. Funds must have a minimum NOK 300 million in assets and be oriented towards specific industrial sectors in order to be eligible for investments. Key industries are energy, marine/maritime, ICT, environment, and life sciences and biotechnology. The Argentum portfolio at end-2002 included three investments in energy, ICT and life science funds.

The **Industrial Development Corporation of Norway** (SIVA) was established in 1968 to aid the development of regional and local clusters of industry throughout the country with special emphasis on local districts. The Ministry of Local Government and Regional Development (KRD) owned SIVA until 2002 when ownership was transferred to the Ministry of Trade and Industry (NHD). SIVA has invested more than NOK 300 million in 60 innovation centres and has spurred co-investment from the private sector amounting to NOK 800 million. However, evaluations found that SIVA's regional funds mainly worked with established types of products and less risky investments (Arnold and Snowden, 2000).

The government has also entered into a number of regional schemes to leverage capital from private investors. The NHD and SND together with the *Norsk Investorforum* (Forum for Norwegian Investors) initiated *START-Fondet* (Start Fund) in 1998 to provide investment and business advice to seed companies with international potential. *START-Fondet* is now a privately-owned limited company to which the government provides subordinated loans towards a total capital base of NOK 320 million. The average deal size is about NOK 7.5 million with investment horizons ranging from two to seven years. Portfolio companies have been mostly in the biotechnology, ICT, and environment sectors. *START-Fondet* is scheduled to be phased out after 15 years in operation.

The *Så Kornkapitalordningen* (Seed Capital Scheme) was also initiated in 1998 and consists of five regional funds that run parallel to *START-Fondet* and focus on locales other than southeast Norway. SND functions as co-ordinator of the different funds, which are privately owned and managed, and contributes half the capital base through subordinated loans. In 2000, the average deal size was NOK 1 million. SND's regional offices manage related programmes to stimulate economic growth and employment in outlying districts such as start-up grants (*Etablererstipend*) for entrepreneurs as well as a scheme providing loans to high-risk projects (*Risikolaneordning*). In addition, SIVA has implemented an ambitious plan to develop 25 full-service (including seed funding) regional technology incubators over a five-year period (Ryker, 2001).

These smaller regional funds and schemes are dispersed, with few large enough to manage portfolio risk. More than co-ordination, merger of these activities is needed. Some of these schemes, as well as *SND Invest*, have been criticised as overly bureaucratic and oriented towards less-risky investments in established product areas (Saetre, 2001). Evaluations have recommended that public management of *SND Invest* should give way to professionals from the private sector (Arnold and Snowden, 2000). Norway should proceed with privatisation of *SND Invest* and merge its other schemes to achieve scale economies in pump-priming private sector investments. Venture funds should be focused on identified high-technology clusters, where they are more likely to be invested in well-supported and successful firms and to show

returns, and not dispersed over regions, where they tend to be more oriented to local development and to be less effective.

### **Business angel networks**

Business angel investment in Norway is limited due to the lack of fiscal incentives for venture capital activities and the smaller net wealth and income of Norwegian investors relative to those in other countries. Estimates of the number of business angels in Norway vary widely. According to *Business Angels Norway* (BAN), a research project undertaken by the Norwegian University for Science and Technology (NTNU) and Ernst & Young, there are an estimated 6 000 business angels in Norway, investing amounts larger than NOK 500 000 (Reitan and Sorheim, 2000). BAN also found through surveys that a large share of Norwegian private investors do not involve themselves actively in the companies they invest in, largely due to the predominance of passive co-investments with other investors. According to other sources, however, there are at the most 1 500 business angels in Norway (ECON, 2003).

There are several networking initiatives in place in Norway. *myVentureLab*, a Web-based business angel network, has been in operation since 2001 and now includes 600 investors. A member of the *European Business Angels Network* (EBAN) since 2002, it works to match projects and entrepreneurs with investors, arranging conferences as well as consultant services to elaborate business plans. *myVentureLab* was initially financed by the Norwegian Industrial and Regional Development Fund (SND), but is now privately organised. *Connect Norway*, which was established in 2001 as an offshoot of the American *Connect* organisation, is a non-profit organisation which provides advice to entrepreneurs through five regional branches. *First Tuesday*, based on a London initiative, aims to match entrepreneurs and investors and has held more than 40 meetings since its start in 1999.

There are also pan-Nordic schemes. The *Nordic Venture Network* (NVN), which was initiated in 1999 and formalised in 2001, is intended to create a competitive Nordic environment for high-technology venture capital investments. A further step in increasing the effectiveness of business angel networks would be to enhance the linkages between networks at the national, Nordic and European levels to prevent information gaps and duplicative efforts. The Norwegian government should also link the activities of angel networks to regional incubators and localised funds to enhance deal flow and co-operation with other investors.

### **Second-tier stock markets**

Following the 2000 Stock Exchange Act, the Oslo Stock Exchange (*Oslo Børs*) became a public limited company and established a secondary market or SMB List with less restrictive requirements. By the end of 2002, 79 companies were quoted on the SMB List with a market value of NOK 18.6 billion compared to NOK 478 billion on the main list (**Table 2**). An electronic over-the-counter (OTC) trading system was organised by *Norwegian Stockbrokers Information Services* (FINFO), a subsidiary of the Association of Norwegian Stock Broking Companies, to assist its members in trading unlisted shares. In addition, SIVA attempted to establish a second-tier market for technology-based start-ups, *InnovasjonsMarkedet*, but their attempt failed. In Norway, the government is a large operator in the stock market, owning one-sixth of the total value of stocks.

Overall, capitalisation on the secondary market is low and exit opportunities for small firms, particularly through initial public offerings (IPOs), are limited. Development of a fully integrated stock exchange across the Nordic bourses continues under the NOREX alliance, which includes *København's Fondsbørs*, the Iceland Stock Exchange, the *OM Stockholmsbörsen* and *Oslo Børs*. NOREX may initiate a cross-border second-tier market for smaller firms. In addition, the Swedish-based Nordic Growth Market or NGM Equity established in 2003 the *Nordic OTC*, a market for small and medium-sized growth firms,

with the intent of creating a common Nordic platform for unlisted companies. The Norwegian government should encourage the creation of a single secondary stock market with scale economies for growth companies through joining with Nordic and/or European partners.

**Table 2. Second-tier stock markets in OECD countries**

Country (stock market)	Year of creation	Number of initial public offers (IPOs)				Number of quoted companies				Market capitalisation (% GDP)			
		1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Sweden (O-List)	1988	..	..	24	9	150	228	240	235	28.3	24.0	23.3	18.5
United States (NASDAQ)	1971	485	397	63	40 <sup>(1)</sup>	4 829	4 734	4 109	3 725 <sup>(1)</sup>	56.5	36.9	28.9	16.5
Canada (Canadian Venture Exchange) <sup>(2)</sup>	1999	2 425	403	330	122	2 358	2 598	2 688	2 504	1.7	10.2	12.7	9.7
Korea (KOSDAQ)	1996	160	250	181	176	453	604	721	843	22.0	5.6	9.5	5.0
Norway (SMB List)	1992	3	7	7	3	78	77	79	79	4.2	1.8	1.5	1.2
United Kingdom (AIM)	1995	67	203	109	78	347	524	629	704	1.5	1.6	1.2	1.0
Ireland (ITEQ)	2000	---	..	..	..	---	7	8	8	---	3.6	1.7	0.7
Italy (Nuovo Mercato)	1999	6	32	5	0	6	40	45	45	0.6	2.2	1.2	0.6
Germany (Neuer Markt) <sup>(3)</sup>	1997	132	132	11	1	201	338	326	240	5.7	6.0	2.4	0.5
France (Nouveau marché)	1996	32	52	9	2	111	158	164	154	1.1	1.7	1.0	0.5
Switzerland (SWX New Market)	1999	6	11	1	0	6	17	15	9	..	3.0	0.9	0.2
Finland (NM List)	1999	..	..	..	..	..	17	16	15	..	0.7	0.3	0.2
Denmark (Dansk AMP)	2000	3	0	1	3	3	3	4	7	0.1	0.1	0.1	0.1
Spain (Nuevo Mercado)	2000	---	..	..	..	---	12	..	14	---	3.4	..	..
Japan (Mothers in Tokyo)	1999	2	27	7	8	2	29	..	..	0.2	0.1	..	..
Japan (Hercules in Osaka)	2000	---	..	43	..	---	..	32	..	..	..	0.3	..
Netherlands (EURO.NM Amsterdam)	1997	1	2	---	---	13	15	---	---	0.3	0.2	---	---
Belgium (EURO.NM Belgium)	1997	6	3	---	---	13	16	---	---	0.2	0.2	---	---
Europe (EASDAQ)	1996	..	..	---	---	56	62	---	---	---	---	---	---
NASDAQ Europe <sup>(5)</sup>	2001	---	---	..	..	---	---	49	43	---	---	---	---
Austria (Austrian Growth Market) <sup>(6)</sup>	1999	..	..	---	---	2	2	---	---	0.01	0.01	---	---

Notes:

<sup>(1)</sup> End of October.

<sup>(2)</sup> Data includes both high-growth firms' shares and shares of investment funds.

<sup>(3)</sup> The Neuer Markt segment will be discontinued after a transition period at the end of 2003.

<sup>(4)</sup> Previously NASDAQ Japan.

<sup>(5)</sup> In 2001, NASDAQ Europe acquired majority ownership in Easdaq.

<sup>(6)</sup> On April 2001, the two stocks in the AGM segment were transferred to the Specialist Segment of Wiener Börse.

Source: Compiled by OECD Secretariat from national sources.

## REFERENCES

- Arnold, E. and Snowden P. (2000), *SND: Organisation and Structure*, Brighton: Technopolis.
- ECON Centre for Economic Analysis (2003), *Venture Capital in Norway*, study prepared for the Norwegian Ministry of Trade and Industry (NHD).
- European Private Equity and Venture Capital Association (EVCA) (2002), *Yearbook 1999-2002*.
- Jacobsen, T. (2003), *Corporate Investors in Norwegian Venture Capital*, Trondheim: The Norwegian University of Science and Technology.
- Jensen, S. E. H. (2001), *Seed Capital in the Nordic Countries: Best Practice*, Copenhagen: Nordic Industrial Fund.
- Norwegian Venture Capital Association (NVCA) (2003), *Survey of Venture Capital Markets in Norway 2002*.
- Reitan, B. (2000), *Kartlegging av rammebetingelser og markedsmekanismer for private investorer ("Business Angels") i utvalgte land*. Trondheim: NTNU/Ernst&Young.
- Reitan, B. (2001), *En empirisk undersøkelse av de finansielle vilkår for SMB i Norge – med spesiell vekt på betydningen av private investorer*. Trondheim: NTNU/Ernst&Young.
- Reitan, B. and R. Sørheim (2000), *The Informal Venture Capital Market in Norway – Investor Characteristics, Behavior and Preferences*, revised version of paper presented at the Babson-Kauffman Entrepreneurship Conference, May 12-15, 1999.
- Ryker, V. (2001), *A Guide to the Status of the Incubator Industry in Norway*, Norwegian School of Management.
- Saetre, A.S. (2001), *The Demand Side of the Informal Venture Capital Market: Four Norwegian Cases*, Trondheim: The Norwegian University of Science and Technology.
- Sørheim, R. and H. Landström (2000), *Informal Investors in Norway – A Categorization and Policy Implications*, paper prepared for the 2000 Babson College-Kauffman Foundation Entrepreneurship Research Conference, June 8-10, 2000.
- STEP (2002), *Norske innovasjonspolitiske virkemidler*, Oslo: Norges Forskningsråd.