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Business angels and venture capital in France: tax challenges

Administrative barriers to setting up new companies have been lowered drastically in France in recent years. For the full benefits of this new policy to show up in the field of innovation, the quality of financing is decisive. Among other things, the new policy aims to attract rare talents to creative endeavours, talents that today are drawn to major companies or public-sector jobs. The financing chain for start-ups needs business angels, i.e., persons who are outside of the entrepreneur's circle of family members or close friends and who have sufficient financial resources to undertake high-risk, high-return investments. Business angels' financial resources ensure entrepreneurs a minimum level of income during the two or three years needed for an innovative concept to take off. In the United States, business angels each year "seed" several tens of thousands of projects with average investments of 100,000 to 200,000 dollars. Further down this chain of selective financing, venture capital funds take over, with sums of more than 1 million dollars, to assist the development of 3,000 to 4,000 higher-potential projects. Even further down the chain, a buyout or market listing helps place a value on mature and high-performance companies. However, neither in France nor elsewhere in continental Europe is there a financing chain on this scale. Business angels are fewer in number and invest about 40,000 euros on average. Moreover, the market for selling growth companies is still segmented and illiquid.

This paper addresses the tax measures that would help direct the savings of the wealthiest individuals to mentoring and financing start-up companies, either directly or through specialised funds. Current tax incentives are fragmented into an array of financing vehicles and are relatively unstable. Moreover, changes are made regularly to investor eligibility, which generates uncertainty on the permanence of the incentives. In this context, laying down a few operating principles would keep the incentives from becoming stratified, a factor that undermines their effectiveness.■

PROPOSALS

1. Limit tax credits (which bring in new investors) to the riskiest portions of investments that are truly focused on companies in the seed phase, and raise the ceiling on tax deductions.
2. Expand capital gains tax deductions to all cash investments in unlisted SMEs.

THE CHALLENGES

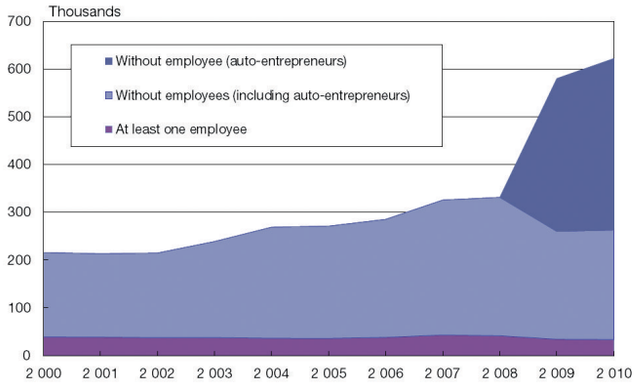
France and Europe in general have fallen behind the pace in true seed financing and in monitoring innovative companies. In France, there is a clear imbalance between direct and indirect investment (the latter *via* funds). The low number of early-stage direct investors shrinks the pool of high-potential projects, as well as returns on these projects and their chances to ultimately create value. Specialised venture capital funds do not fill this void and, in fact, mostly ignore early-stage financing. In response, tax incentives appear to direct some investors towards investments that are attractive for tax reasons but not for business reasons. Do such incentives sufficiently reflect the various stages of financing? Shouldn't they be conditioned more on the risk taken by the investor and his actual contribution to mentoring start-up companies?

THE NEED FOR SEED-DEDICATED FINANCING CHANNELS

Some background on business start-ups in France

The impact of business start-ups on innovation, growth and employment varies widely from one country to another. The impact depends on the density of companies with high potential for development. In France, after amounting to about 200,000 annually since the 1990s, the number of business start-ups has risen considerably since 2005 thanks to successive measures to reduce the number of obstacles that entrepreneurs face in registering their companies. This trend is reflected in the boom in the number of *auto-entrepreneurs* (i.e., a French facility for one-person companies generating revenues below a certain threshold) since 2009, and helps to disseminate a culture of project financing, while removing the barriers between salaried staff and entrepreneurs. However, when narrowing our observations to just those start-ups employing at least one person (Chart 1) or to high-tech start-ups, the proportion of which has stalled at 5% over the past 15 years, we can see considerable room for improvement.

Chart 1:
Entreprise births with and without employees



Source: INSEE

Many analysts agree that large companies are not always best organised to encourage disruptive innovation (Christensen, 1997 ; Baumol, 2001[1]). But in mature economies; that can no longer keep up otherwise[2], creativity in products and services is a decisive factor in competitiveness. Achieving such an objective requires innovation that is stimulated in part by new entrants. For this to happen and to attract the best people, private, dedicated financing channels must be organised through substantial tax incentives, as seen in the model set-ups of Israel or the US.

Inset 1:
The impact of financing modes on the innovation process

Many empirical studies have been done on the impact of venture capital.

Engel[3], for example, found that it has a positive effect on companies' growth prospects and encourages disruptive innovation within companies by helping new products to emerge and be brought rapidly to the market[4]. Kortum and Lerner[5] found that venture capital-supported firms in the United States are on average three times more innovative than comparable, non VC-funded firms.

Romain and Van Pottelsberghe de la Potterie[6] found that in 16 OECD countries the increase in venture capital investment stock is a significant factor in the increase in total productivity of factors in the 1990s, in two main ways: by promoting experimental development and innovation, and by helping firms better "absorb" know-how from public and private research entities.

(1) Baumol W. (2001), *The Free-Market Innovation Machine. Analysing the Growth Miracle of Capitalism*, Princeton University Press; Christensen C.M. (1997), *The Innovator's Dilemma. When New Technologies Cause Great Firms to Fail*, Harvard Business School.

(2) Such economies are also said to be "close to the technological frontier". See also Aghion, P. and Cohen, E. (2004), "Education and Growth", report of the Council for Economic Analysis, La Documentation française.

(3) Engel D. (2002), "The Impact of Venture Capital on Firm Growth: An Empirical Investigation", ZEW Discussion Paper, n° 02-02.

(4) Hellmann T. and Puri M. (2000), "The Interaction Between Product Market and Financing Strategy: The Role of Venture Capital", *Review of Financial Studies*, 13 (4), p. 959-984.

(5) Kortum S. and Lerner J. (2000), "Assessing the Contribution of Venture Capital to Innovation", *Rand Journal of Economics*, 31, p. 674-692.

(6) Romain A. and Van Pottelsberghe de la Potterie B. (2004), "The Economic Impact of Venture Capital", *Working Papers*, CEB 04-014.RS, Université libre de Bruxelles.

Asymmetry of information is especially acute in innovative activities

Financial constraints are especially tight on innovative companies in the start-up phase, given the asymmetry of information between investor and entrepreneur. Access to external funding is limited primarily by the difficulty in assessing the future market addressed by innovative companies, with the entrepreneur having a better view of the prospects of his company than an external financier. The high proportion of intangible assets involved in the innovation process exacerbates this asymmetry of information and leads to heavy insurance or contracting costs. Another constraint is created by the fact that return on investment is deferred, especially in the case of early-stage financing. And, finally, a third constraint is the weakness of available collateral, particularly in projects with a heavy proportion of intangible assets, which mostly rules out the use of bank financing.

The resulting uncertainty is mitigated by the presence of specialised intermediaries such as business angels and venture capital firms who are able to review a business plan in detail, to rigorously select promising projects and follow up on them, to lend advice, to mentor company management and to organise syndicated financing[7].

A financing and expertise chain that must continue throughout the company's various stages of development

Seeding ecosystems presuppose an entire financing chain. The ability of various categories of investors to take over from other categories of investors is decisive in ensuring the liquidity and profitability of seed financing and in securing the development of high-potential projects.

Inset 2:

Defining the stages of private equity: the financing chain

Start-up capital usually comes from the entrepreneur's own funds or his family circle's funds, a bank loan, or public R&D subsidies[8].

Seed capital generally comes from business angels who operate at an early stage of the financing chain, thus freeing up creators to demonstrate the validity of the technological or commercial concept. These are individuals who invest a portion of their own funds directly into innovative companies, through one or more debt or equity instruments. After a careful selection of newly created/started up companies, they often avail the company of their experience, strategy skills and networks of contacts. Through their dual contribution of sweat equity and financial equity, their higher tolerance for risk, and their responsiveness, they are important participants in the upfront financing of young, high-potential companies.

Venture capital often takes minority equity stakes in companies that already have a legal existence and strong potential for growth and profitability, stakes that it keeps for a duration generally limited to the project's planned duration (three to seven years)[9]. These investors are exposed to the company's risks without guarantees, but they spread these risks out within a fund. Some states do offset a portion of potential losses through fiscal deduction of losses schemes.

Companies may then call in **development capital** if they need it to accelerate their internal or external growth. Once mature, the company is acquired, transferred or divested through a leverage buyout (LBO), or, in the event of difficulties, turnaround financing.

So for each stage in a company's development, there is a specific type of investor, with a specific role and a specific amount that he is willing to commit, an amount that depends on his level of risk aversion, among other things. Very early in the process, the assessment of human, scientific, technical parameters, personalised advice, and organisational issues are more important than financial strategy issues, which come to the fore as the project matures. The amounts at stake rise as the companies develop. The table 1 describes the amounts at stake on average in the US.

The lack of a seamless link between different financing categories can create breaks in the SME financing chain and reduce the early-stage forecast return. Moreover, unless there is an active and liquid, listed or OTC secondary market, any move to raise funds tends to generate inflation on the least risky LBO deals instead of encouraging the emergence of new entrants. Harrison and Mason[10] have found, for example, that when business angels and venture capitalists complement one another, there are benefits for everyone, including the entrepreneur. A more seamless connection also allows the business angel to partially offset his lower returns.

(7) Aghion P. and Bolton P. (1992), "An Incomplete Contracts Approach to Financial Contracting", *The Review of Economic Studies*, 59 (3), p. 473-494; Montchaud S. (2004), *Innovation et risques*.

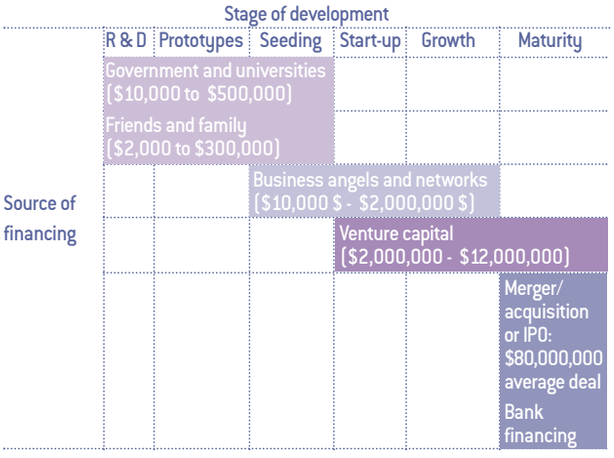
(8) In France, the main sources of mentoring for start-ups are the government agency Oséo ("young innovative companies" mark-up for start-ups, for purposes of venture capital *fonds communs de placement*, business start-up loans, SME pacts, etc.), or regional facilities (regional incubators).

(9) A distinction is generally drawn between early-stage financing, when the innovative project idea takes concrete form and a potential market takes shape, and mid-stage financing, when the company enters its development phase. Venture capital sometimes steps in with later-stage development capital, when the company has demonstrated its market's potential, in which case it then needs additional financing to accelerate its internal or external growth.

(10) Harrison R. and Mason C. (2000), "Venture Capital Market Complementarities: The Links Between Business Angels and Venture Capital Funds in the UK", *Venture Capital*, 2, p. 223-242.

Table 1:

Sources of financing based on the stage in the company's life cycle



Source: National Governors'Association Center for Best Practice

Each link in the ecosystem is therefore essential in financing companies with high growth potential. Fundraising and divestment issues must be addressed simultaneously, as venture capital returns depend on the terms available for divestment.

THE WEAK POINTS OF SEED FINANCING IN FRANCE

France is characterised first of all by the very low proportion of business angels in early-stage financing. There are potentially 350,000 individuals having sufficient financial resources to make equity investments in fast-growth start-ups, i.e., who are able to invest 100,000 euros in a company's equity without being more than 5% exposed to that risk. But the actual number of business angels is 60 times fewer than that. Nor do investment funds have much taste for early-stage financing.

Few business angels means under-supervised start-ups

Because most of these individual investments are private in nature, it is hard to analyse their extent and impact. The main figures available are from business angel networks, which include an increasing number of investors. However, this represents only the tip of the iceberg, as seen in the gap between the total estimated UK market and the estimated market of network-organised business angels (i.e., 426 vs. £63 million). In France, the gap is narrower, as half of business angels belong to networks, according to estimates. All in all, there are fewer business angels in the European Union (75,000) than in the US (265,000), where their numbers have been encouraged by targeted tax incentives set up by individual states[11].

Table 2:

Some figures on business angels inside and outiside networks

	France	United-Kingdon	European Union	United States
Number of BA networks	81	24	334	250
Number of BAs - within networks - total	4,000 8,000	5,500 50,000	75,000 100,000	265,400
Total BA investment - within networks - total	€62.5 million (€125 million in co-investment)	£62.8 million (£123.2 million in co-investment) £426 million	€3 or 4 billion	$20.1 billion
Average amount *per* BA and *per* project	€16,000	£77,000 (10,000 à £500,000)		$76,000 $40,000 (Angel capital association)
Number of BAs *per* project	14 BAs	2.5 BAs		4.3 BAs
Number of companies financed	280	307		61,900
Stage of involvement	75% first round	50% first round		41% first round
Sources	*France Angel 2010*	*British BA association 2009*	*European BA association 2009*	*Center for Venture Research 2010*

BA : business angels

The low number of business angels in France means they play less of a role in reducing uncertainty as co-builders of the company. Studies[12] have found that business angels in the US are important for company survival (increasing the chances of survival in the first four years by one third), brand recognition, and ability to secure later-stage financing. Their role was only recently recognised within the EU, which explains why they are so much less prominent than in the US.

Inset 3:

The equity gap problem

In France, business angels generally invest between 5,000 to 500,000 euros (Ernst & Young, 2007[13]). Almost 70% of investments are below 50,000 euros, whereas an average of about 300,000 euros is needed to create an innovative company. To fill this gap, pool investing has become

(11) Half of the states offer tax credits under certain conditions (i.e., for high-tech companies, certain locations, for R&D, carrying investment limits, etc.) and for highly variable amounts (15% to 100% of the investment).

(12) Kerr W., Lerner J. and Schoar A. (2010), "The Consequences of Entrepreneurial Finance: A Regression Discontinuity Analysis", *NBER Working Paper*, n° 15831, March.

(13) Ernst & Young BAS (2007), *Étude sur le financement des jeunes entreprises technologiques par les business angels en France*, final report submitted to the French Ministry of Higher Education and Research, June.

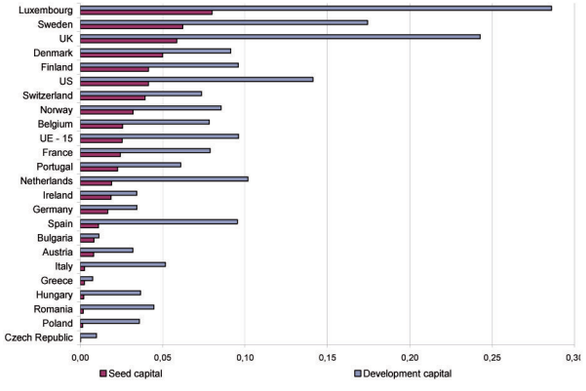
common among business angels but they are still far from the average investment in Europe (which is twice as high). The high number of business angels per project can also be problematic when taking decisions among investors.

Moreover, the venture capitalist threshold in Europe is higher and higher (at 1.5 to 2 million euros). This is widening the gap between accessible upfront investments and the threshold below which venture capitalists do not invest (i.e., the so-called equity gap). This is making it harder for most entrepreneurs to secure financing. Business angels play a key role by stepping into the gap. In France, start-up financing is especially low in the range of 80,000 to 1 million euros. The US took measures to remedy the equity gap as far back as 1958, when the Small Business Investment Act, which created Subchapter S and SBIC[14], recognised that venture capital could not invest in start-ups, as the necessary amounts were too low.

Low upfront investments, and a private equity focus on less risky later-stage financing

The French private equity industry – which includes venture, development and buyout capital – is the second-largest market in Europe and is doing rather well when judging by the total quantity of funds raised and invested every year. However, private equity provides little support during the initial phases of company development, which carries a disproportionate share of risk and uncertainty, and it provides little support to high-tech sectors. The vast majority of financing is steered towards leverage buyouts (Charts 2 and 3).

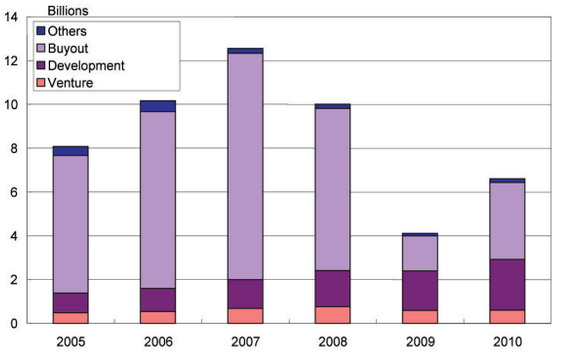
Chart 2:
Seed and development capital, average (2002-2009), % GDP



From 2002 to 2009 the French venture and development capital industry was in the European norm for invested amounts (equivalent to 0.10% of GDP). The UK and other northern European countries invested a relatively high amount in GDP terms. Germany was below average but was ahead of France and the UK in terms of relative and absolute levels of investment in early-stage financing.

Source: Eurostat

Chart 3:
Private equity investment breakdown in France, by company devepment stage



After expanding slightly from 2005 to 2008, venture capital contracted during the crisis, but to a lesser extent than in other European countries. Further down the financing chain, development capital nonetheless continued to expand during the crisis.

Source: AFIC figures, 2010

The amounts invested in each deal are also lower than on leading markets. An average of 3750 companies were funded annually by venture capital in the United States from 1995 to 2010, with an average investment of 6.8 million dollars each. In France, relative to the size of its market, a higher number of companies were funded during the same stretch of time (1160), with an average investment of 1.7 million euros (1.5 million euros by venture capital and about 2.3 million euros by development capital). That means that US investors are more selective, funding few companies with higher outlays. And for young companies creating disruptive innovation it is even more important to obtain rapid and substantial financing as the first-mover advantage and speed of expansion on a market segment are decisive in their future development[15].

Seed capital offers low pre-tax returns

Investors generally require higher returns in venture capital than in other assets, due to the uncertainty hanging over their investment, and the low portfolio liquidity. Moreover, due to the tight control exerted over the companies, portfolios are usually narrow, which exacerbates this risk. Venture capital returns thus vary widely from one fund to another. This is partly due to the skills of the fund managers but also to the funds' size, which is directly correlated to team expertise[16].

From this point of view in Europe, and in France in particular, private equity returns are far below US standards in early-stage financing, before taking tax breaks into

(14) Subchapter S is a tax facility for entrepreneurs: subject to certain precise criteria, they may choose to pay corporate tax or income tax. The Small Business Investment Company Program aims to promote the emergence of professional investment funds by making leverage available to private equity funds.

(15) Dhont E. and Lallement R. (2011), "*Investissements d'avenir et politique industrielle en Europe : quel ciblage et quelle sélection des projets innovants?*", *La Note d'analyse*, n° 236, septembre.

(16) Kaplan S. and Schoar A. (2005), "Private equity performance: Returns, persistence and capital flows", *The Journal of Finance*, vol. 60, n° 4, p. 1791-1823, August.

account. Returns are better on the French development capital segment, which nonetheless varies widely depending on the investment's "vintage year". Returns on investments made from 1988 to 2009 suggest that average venture capital returns are negative in France and almost nil in Europe (Table 3 and Chart 4). In fact, a comparison with other, less risky asset classes, such as listed shares or small caps, suggests that the lower returns on venture capital would not seem to justify its greater risk. However, once the tax benefits are factored into the equation, the differential in the returns of French venture capital funds narrows. For example, the internal rate of return of an investment in a *fonds commun de placement dans l'innovation* (innovation-oriented venture capital mutual fund) is currently slightly negative but very positive when including the tax break in the calculation.

Table 3:

Internal rate of return (IRR) of private equity in France, for each development stage, since fund inception

	2005	2006	2007	2008	2009	2010
Venture risque	– 5.1 %	– 0.6 %	– 0.5 %	– 2.7 %	– 3.0 %	– 2.6 %
Development-capital	11.7 %	8.7 %	8.2 %	7.6 %	6.9 %	6.7 %
Buyout capital	15.5 %	20.1 %	21.3 %	14.5 %	14.6 %	15.6 %
Total	10.7 %	13.4 %	14.7 %	8.5 %	8.4 %	9.1 %

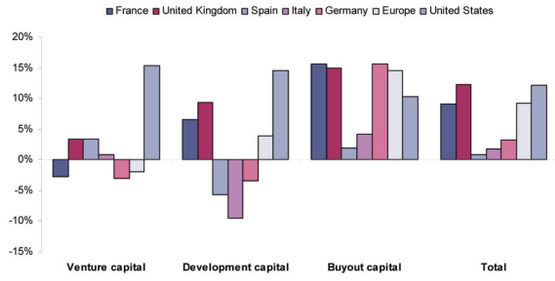
Note: The net IRR referred to here, measures fund returns before taxes from the point of view of the investor as a subscriber in a vehicle such as FCPR, FIP, FCPI, SCR and other funds, and covers investments from 1988 to December of the year indicated. Private equity returns are hard to measure, as portfolio companies are not listed. Barring divestments or IPOs that would provide an objective valuation of the stakes held and makes it possible to calculate the returns on investments, this is the rate of return that equals the flows invested after successive calls for funds and the flows paid out to investors (in cash and sometimes in securities), as well as the estimated redemption value of shares held in the vehicle at the calculation date.

Sources: AFIC, Ernst & Young, Thomson Reuters

However, the existence of upfront tax incentives presents a dilemma. They guarantee to the investor a minimum return but, in so doing, suggest that an entire series of investments is not cost-effective. Most importantly, they do not resolve the underlying issue of investment returns, which is closely dependent on investors' ability to ultimately liquidate their investments on good terms on a secondary market[17].

Chart 4:

Internal rate of return of private equity by region and stage of development from fund inception to the end of 2010



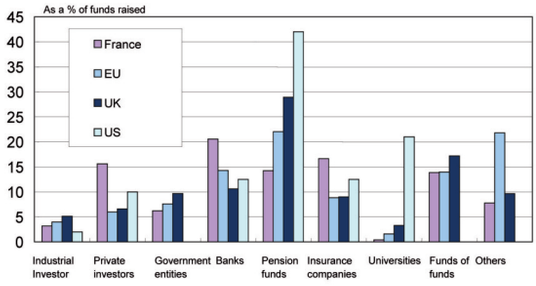
Sources: AFIC, Ernst & Young, Thomson Reuters

THE IMBALANCED BREAKDOWN IN FUNDRAISING

In France, the breakdown in fundraising stands in contrast with the model prevalent in Anglo-Saxon countries and with the European average through its heavy proportion of banks and private investors, two factors that do not favour sizeable upfront investments or risk-taking[18]. Over the past ten years, households have accounted for more than 15% of private equity fundraising (20% when including family offices[19]), whereas they own just 10% of unlisted French shares in value terms. In the United States and Europe, private investors (including family offices) account for, respectively, just 10% and 7.6% of funds raised. Banks are the top investors in private equity, a characteristic that is found in other continental European countries but is in stark contrast with the US or the UK (chart 5).

Chart 5:

Breakdown in funds raised in Europe



in 2002-2010

Note: 2005 figures for the United States.

Sources: AFIC, BVCA, EVCA, NVCA

[17] Good liquidation terms requires intense buyout activity, notably through the external growth strategies of SMEs and major groups, or the existence of a deep and liquid market for a possible IPO on a non-regulated market.

[18] A. Saillard (2011), "Venture Capital in Bank- and Market-Based Economies", *WIFO Working Papers, 389/2011*. Market-based Economies.

[19] *Ad hoc* entities in charge of managing especially large personal fortunes.

Symmetrically, the portion of funds raised from institutional investors such as pension funds, funds of funds, or public-sector entities is far below the EU-15 average or the UK level. In the UK, financing mainly come from pension funds, three fourths of which are from outside the UK, from the US in particular[20].

Directing wealthy individuals towards the business angel segment

To develop business angel channels, high-net-worth individuals must be encouraged to invest directly, with a close personal involvement, but, instead, French tax incentives push these individuals towards indirect, and less risky, financing channels.

Failure rates are especially high for start-up companies, at about 40% for business angel financing and still about one third at the venture capital stage, and then 10% to 15% in the development and buyout stages[21]. But just a few investments can make an entire portfolio profitable (one investment out of five generates a return over 50%)[22]. Moreover, mentoring company managers reduces the possibilities of diversifying risks and hence limits the size of individual investors' positions, even for the very wealthy ones.

To promote the emergence of true professionalism among investors, regardless of what stage they are involved in, it is necessary to rethink current tax incentives in France. Streamlining and calibrating the various vehicles along the lines of British simplicity would be an initial step in preventing a proliferation of tax shelters. Instead of restricting tax breaks to complex vehicles whose risk exposure is variable, these incentives would be commensurate to the risk actually taken by the investor, by offering tax exemptions only to the portion of direct or indirect investment that is oriented towards innovation. France has developed several specialised vehicles in the last two decades (*including FCPR, FCPI, FIP,* and *ISF-SME* holding companies, which are explained in the appendix), to which large amounts of fundraising has been directed. However, a recent report of the *Inspection Générale des Finances*[23] points to the incumbent advantages that certain investment vehicles have benefited from. These mechanisms are also criticised for their lack of standardisation and have even been compared to tax enhancement tools rather than true tools for professionalising companies financing.

Incentives are only loosely linked to the actual risk taken

The loose conditions attached to these vehicles from the point of view of financing stage or type of company targeted tend to orient potential business angels towards indirect financing channels that allow risks to be spread out better. Channelling investment through funds weakens the process of project selection and mentoring that business angels can provide. It also limits the size of upfront investments, since the tax break is capped at a relatively low level in comparison with other countries. Compared to English-speaking countries, the eligibility criteria of companies entitling investors to tax exemptions are rather broad (see appendix), and this tends to make those investors less selective and tends to cap their investments at excessively low levels with regard to the financial needs of a start-up company.

Two tax incentives in particular encourage investment in companies: the Madelin incentive (1994) and the *ISF TEPA* (2007). Until 2010, the Madelin incentive allowed investors to deduct 25% of their investment from their taxable income; the *ISF TEPA* allowed investors to deduct 75% from their wealth tax ("*ISF*") base, a figure that was recently lowered to 50%. Under these two measures, private investors have invested a little more than 2 billion euros, compared to about 1 billion in lost tax receipts for the state (2009). However, out of this amount, only a small amount (less than 125 million euros) is invested directly in start-up companies, with upfront investments amounting to more than 100,000 euros.

In comparison, the UK's direct investment incentive adopted in 1974, the Enterprise Investment Scheme (EIS) (20% income tax deduction and an exemption on capital gains

(20) The under-representation of pension funds compared to English-speaking countries raises the issue of how to attract foreign investors to this segment. Foreign pension funds bring expertise, financial wherewithal and long investment horizons. Israel is the best example of a country where the venture capital sector almost exclusively draws on foreign investment (i.e., 90%, 70% of which is from the US), due to a total tax exemption on those inflows since 2002.

(21) About 10% of venture capital capital-financed start-ups in the last 10 years have returned more than five times their initial investment, thus offsetting many loss-making investments (44% of companies financed). See Ministry of the Economy, Finances and Industry, DIGITIP (2002), *Four Pages of Industrial Statistics*, n° 165, September, Paris.

(22) In the United States, just before the crisis, with an average internal rate of return of about 27% (higher than for private equity), 52% of business angels had lost money on their portfolio, while 7% of them accounted for 75% of the gains. Wiltbank R. and Boeker W. (2007), "Returns to Angel Investors in Group", *Working Paper*, Ewing Marion Kauffman Foundation.

(23) Durieux B. *et al.* (2009), *Les frais prélevés sur les produits financiers bénéficiant d'un avantage fiscal pour favoriser l'investissement dans les PME*, IGF report n° 2009-M-066-03, October.

tax after three years), directs 600 million pounds annually to companies with less than 50,000 pounds in assets:

- in France, the Madelin incentive and the *ISF TEPA* target companies whose balance sheets are smaller than 43 million euros, while the UK's EIS covers companies with balance sheets smaller than 7 million pounds;
- caps on direct investment are also low: in France 20,000 to 40,000 euros for the Madelin incentive and 90,000 euros for *ISF TEPA* vs. 1 million pounds for the EIS in the UK. To obtain a similar benefit, a potential investor would be better off investing in a mutual fund. In contrast, two thirds of EIS funds go directly to companies through tranches of more than 75,000 pounds (about 100,000 euros).

On the purely tax level, incentives in favour of venture capital can take two forms:

- a tax credit for early-stage financing of eligible investments encourages investment even more by reducing risk for all investors, but by offering a guaranteed return on their investment, this can lead to "empty shell" investments made purely for tax reasons;
- a reduction in the capital gains tax for qualified investments covers a broader investment spectrum: by rewarding only successful investments its cost is lower for the state but it also attracts fewer investors. Lerner[24] stressed that the capital gains tax cut has had a decisive positive impact on investment in venture capital and increased investor risk-taking considerably.

In France, indirect investment funds are eligible for the upfront tax credit, whereas they are able to spread risks and generate average post-tax returns of about 6-10%[25]. This makes the principle of an upfront tax credit debatable. Guaranteed returns in the form of a tax credit should therefore be targeted to high-risk stages and to investors who have few options for diversifying their risks. An excessively broad scope not only makes the mechanism look like easy money, it also constitutes a disincentive for selecting projects and mentoring management.

PROPOSAL 1

Limit tax credits (which bring in new investors) to the riskiest investments that are truly focused on companies in the seed phase and raise the ceiling on tax deductions.

Two major criteria should apply to tax credits (on income tax or wealth tax):

- whether the investment is direct or indirect. The upfront incentive should probably not be the same for both direct investments and investments in mechanisms that spread risks;
- the phase of development of the company concerned. A clear premium should be granted for the seed stage, in restricting the scope for eligible companies.

Under this proposal, French tax residents would be allowed to deduct from their income tax or wealth tax 35% of their direct cash investments, or 20% for indirect subscriptions, in upfront capital or capital increases of eligible companies. Deduction caps would be raised to promote higher upfront investments ranging from about 100,000 to 500,000 euros, which would be likely to reduce the equity gap.

Heading down this path would require simplifying, standardising and restricting the scope of eligible companies. This would help level certain tax shelters all the while focusing incentives on new companies likely to regenerate the industrial fabric.

Companies meeting the following criteria could be considered eligible for an upfront tax credit on investments in seed companies: a small company as defined by Eurostat (fewer than 50 employees, no more than an annual turnover or a balance sheet that does not exceed 10 million euros) total and:

a. be in the seed, start-up, or expansion stage, based on the definition given by the EU directives on government assistance to promote private equity in SMEs (2006/C194/02);

b. or be younger than five years;

c. or spend on R&D, in three years, the equivalent of at least one third of the highest of the previous three year's turnover, or have received the *Oseo Innovation* designation (a criterion that would have to be harmonised with that of the "young innovative company").

(24) Lerner J. (1997), "Angel financing and public policy: An overview", *Journal of Banking and Finance*, vol. 22, n° 6-8, p. 773-783.

(25) True, IRRs of the 1999 generation of *FCPI* funds, whose initial investments came during the dot.com bubble, were very negative, at about –45%. But this was an anomaly linked to a financial bubble and cannot be considered a structural phenomenon that requires a permanent government-sponsored mechanism.

PROPOSAL 2

Expand capital gains deductions to all cash investments in unlisted SMEs

Capital gains taxes would be cut for a broad range of cash investments. This reduction would be targeted mainly to SMEs as defined by the EU, and unlisted on a regulated market and independent from sector criteria (but perhaps not from age criteria). This incentive would have the advantage of being less distorting than the previous one, as it does not send out a signal in favour of the least-performing investors. It would attract investors to potentially high-yielding assets (even if such high returns are not ordinary) and would stimulate project screening and mentoring.

The capital gains tax rate does vary widely from one country to the next. In France it is 31.3% (i.e., 19% + 12.3% in social-welfare levies) but just 12.3% on the personal equity plan (when the savings plan has been held at least five years); in the United States, it ranges from 0 to 15%, depending on the tax bracket, for securities held for more than one year and from 10% (the lowest tax bracket) to 35% (the top tax bracket) for securities held for less than one year[26]. It varies from 18% to 28% in the UK, depending on the tax bracket, but unlisted securities are tax-exempt after three years of ownership.

These criteria would lead to a graduated and simplified incentive mechanism, regardless of the concerned vehicles. Such progressiveness would be a boon to developing the profession of business angel.

Table 4:
An overview of the recommandations

	Direct investment in a SME or SOHO	Indirect investment in a SME or SOHO
Deduction from income tax or wealth tax	35%, restricted to the portion of investments in eligible companies in the seed phase, capped at €200,000	20 %, restricted to the portion of investments in eligible companies in the seed phase
Capital gains tax	12.3% (social-welfare levies), after three years of ownership	
Deduction of losses	Looser restrictions on deducting losses	

(26) Plans call for raising the capital gains tax to 20% in 2013 (only 10% for the lowest tax bracket) for securities held for more than one year and between 15% (the lowest tax bracket) and 39% for shorter-term holdings.

CONCLUSION

The current challenge is therefore to attract new participants to the financing chain by enhancing the attractiveness of the business angel segment, and by restricting the fiscal incentives for indirect investment to true seed capital. This means targeting government incentives for individuals more efficiently and creating the conditions for more fruitful interactions between the various participants in the financing chain. An efficient financing chain can unleash a virtuous circle, in which the best talents are once again drawn to entrepreneurship, and the successful ones are encouraged to become business angels themselves.

With this prospect in mind, the emergence of a new generation of venture capital funds investing in innovation (mainly technological)[27] is a promising development. Founded by current or former Internet or ICT entrepreneurs, these funds have expanded the channels for investment, while also dabbling in business angels' traditional realm. The reform of the tax framework is all the more promising as it is part of a shift in the entrepreneurial ecosystem that includes new institutional modes of mentoring (i.e., crowdfunding[29], and new types of incubators[30]).

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(27) Funds such as Jaïna Capital, Kima Ventures, ISAI, and Serena Capital.

(28) Crowdfunding refers to the practice of attracting equity funding from individuals, an approach that has been facilitated by the Internet. Organised by a company (such as Wiseed or FinanceUtile), crowdfunding enable s very low investments by individuals (averaging €750) in their first development stage of spotted promising start-ups.

(29) One example is "Le Camping" of the French "Silicon Sentier", a transitory incubator for start-ups with innovative projects. It provides mentoring from experts and/or entrepreneurs to kick off the project, in order to quickly enable a presentation to business angels and venture capitalists.

Intermediary	Targeted companies	Tax benefits	Thresholds
Direct investment	An independent SME as defined by the EU: - A commercial, industrial, craftsman, professional or agricultural activity; Excludes activities whose prices are regulated, as well as financial and real-estate activities.	Deduction of 22% of the invesment (25% under the 2010 government budget bill), as long as the securities are held for at least five years; **or** (until January 2011, the portion of capital not eligible for a wealth tax deduction could be deducted from income tax) Deduction of 50% of the investment from wealth tax (75% under the government budget bill until 2010).	Annual cap on eligible investments: €20,000 for individual tax filers or €40,000 for joint filers for an investment in an SME (deduction capped at €4,400 and €8,800, respectively). Special case: €50,000 for individual filers and €100 000 for joint filers for investment in companies in the seed, start-up or development phase (i.e., younger than 5 years). Benefit capped at €45,000
Direct investment in a in a young innovative	Criteria for young innovative companies: - Be a SME younger than eight years old with 250 employees or fewer; - Generate less than €40m in turnover or have a total balance sheet company smaller than €27m; - Spend on R&D an amount that is equivalent to at least 15% of total expenditure of the financial year under consideration; - Be created *ex nihilo* (to the conclusion of a takeover of an existing business, a merged or acquired business, etc.); - Be at least 50% owned by individuals or indirectly by a SME itself at least 50% owned by indivuals (excluding stakes held by investment funds)	The above-mentioned deductions on income tax and wealth tax; **and** Total exemption on capital gains after three years of ownership (not counting 12.3% in social-welfare levies).	
FCPI (*fonds commun de placement dans l'innovation*, a sort of venture capital mutual fund focusing on innovation)	At least 60% invested in innovative EU companies that are not listed on a regulated market and that have fewer than 2,000 employees. - SMEs traded on *Alternext* are considered unlisted; - No turnover or balance sheet total criteria; - R&D spending equivalent to at least 15% of tax-deductible expenses for the year, or 10% for indutrial companies, or having received the *Oseo Innovation* designation.	(*FCPI* and *FIP*) 22% of the investment may be deducted from income tax (25% under the 2010 government budget bill); **and** Total exemption on capital gains after five years of ownership (not counting 12.3% in social-welfare levies).	Eligible investment capped at €12,000 and €24,000 (with the benefit capped at, respectively, €2,640 et €5,280 for a single tax filer and double that for joint filers)
FIP (*fonds d'investissement de proximité*, a mutual fund investing in local companies)	At least 60% invested in securities of a French unlisted independent *SME* (as defined by the EU) from no more than four bordering regions: - At least 10% must be invested in companies younger than five years - 20% of assets may be invested in listed European small caps (i.e., less than €150m)		
FCPR (*fonds commun de placement à risque*, a sort of venture capital mutual fund)	At least 50% invested in unlisted companies with no restrictions on size, sector and age.	(*FCPR, FCPI ISF* and *FIP ISF*) 50% of the investment may be deducted from wealth tax, within the limit of the quota of eligible companies chosen by the investment fund **and** Total exemption on capital gains after five years of ownership (not counting 12.3% in social-welfare levies).	Benefit capped at €18,000
FCPI ISF	At least 40% invested in eligible companies* younger than five years.		
FIP ISF	At least 20% invested in eligible companies* younger than five years		

**Eligible companies: Independent SMEs as defined by the EU; exercing a commercial, industrial, craftsman, professional or agricultural activity, and whose registered offices are in an EU member country (or in a country that has signed an anti-tax evasion tax convention); in the seed, start-up or development stage. Total payments eligible for the wealth tax deduction are capped at €1.5m per year.*

Notes d'analyse :

N° 236 ■ **"Investissements d'avenir" et politique industrielle en Europe : quel ciblage et quelle sélection des projets innovants ?** (septembre 2011)

N° 208 ■ **Entreprises et innovation – Les aides publiques à la R & D : mieux les évaluer et les coordonner pour améliorer leur efficacité** (janvier 2011)

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