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STATUS OF PROGRAMME IMPLEMENTATION

**PROMOTING AN ENABLING ENVIRONMENT FOR EFFICIENT FINANCIAL
INTERMEDIATION IN SUPPORT OF INNOVATIVE DEVELOPMENT**

**POLICY RECOMMENDATIONS ON IMPROVING THE REGULATORY
ENVIRONMENT FOR THE FINANCING OF INNOVATION-RELATED ACTIVITIES**

Note by the secretariat

Summary

The Programme of Work of the Committee on Economic Cooperation and Integration for 2006-2008 mandates the preparation of Policy recommendations on improving the regulatory environment for the financing of innovation-related activities. This document largely draws on the findings of a Comparative Review of the “Effects of government policies and regulation on financial intermediation supporting the knowledge-driven development;” and the inputs from the CECI expert network in this area, including the outcome of the International Conference on “Investing on Innovation: Promoting New Opportunities in the UNECE Region” held in Geneva on 10-11 April 2008.

The document presents the various stages of the development cycle of innovative companies and discusses the different financing alternatives that are more suitable at each stage. It identifies a range of policy options to support innovative enterprises in their effort to raise finance. These include general aspects of the tax and regulatory environment but also specific programmes. These Policy recommendations also present the desirable features of public interventions in this area and discuss relevant considerations in the design of support programmes.

CONTENTS

	<i>Paragraphs</i>	<i>Pages</i>
INTRODUCTION.....	1-4	3
I. THE NATURE AND FINANCING OF INNOVATIVE		
ENTERPRISES.....	5-12	3-4
II. FROM IDEAS TO START-UPS	13-37	5-9
III. EARLY-STAGE GROWTH.....	38-59	9-12
IV. FINANCIAL DEVELOPMENT AND PUBLIC CAPITAL.....		
MARKETS.....	60-71	12-14
V. GENERAL CONCLUSION.....	72-81	14-16

INTRODUCTION

1. The Programme of Work of the Committee on Economic Cooperation and Integration (CECI) for 2006-2008 in the focus area “Promoting an enabling environment for efficient financial intermediation in support of innovative development” envisages the preparation of the following documents:

(a) Comparative review of the effects of government policies and regulation on financial intermediation supporting the knowledge-driven development; and

(b) Policy recommendations on improving the regulatory environment for the financing of innovation-related activities.

2. The Comparative review of national policies and practices, drafted in consultation with the CECI network of experts and stakeholders, will be released as an official UNECE publication under the title “Policy Options and Instruments for Financing Innovation: A Practical Guide to Early-Stage Financing”.

3. These Policy recommendations are based on the findings of the Comparative Review and the outcome of an International Conference, which took place in Geneva on 10-11 April 2008 (ECE/CECI/CONF.2/2). A number of policy options and instruments to support innovative enterprises in their effort to raise finance are identified. These include general aspects of the tax and regulatory environment but also specific targeted programmes.

4. The Policy recommendations are derived from the experiences of UNECE member States, which provide ample scope for transnational policy learning. The activity of innovative enterprises and their efforts to raise financing have a strong international dimension, which has also been reflected in the elaboration of these Recommendations.

I. THE NATURE AND FINANCING OF INNOVATIVE ENTERPRISES

5. Innovative enterprises are engines of economic growth and job creation. They seek to commercially exploit new ideas, technologies, inventions or other scientific or market knowledge and business practices by introducing new products or services, creating or entering new markets, or applying new, more efficient methods of production or organization. Most innovative enterprises start out small and private, seeking to reveal the uncertain commercial promise of a novel idea.

6. There are distinct development stages through which an innovative idea germinates into a commercially successful enterprise:

(a) The seed stage covers the initial research and development of an idea or business concept, focused on determining its technical feasibility, market potential, and economic viability;

(b) The start-up stage includes the development of a product prototype, initial market research and market reach activities, and the establishment of a formal business organization;

(c) The early-growth stage pertains to small-scale commercialisation and growth as well as to the development of the pillars for the scalability of the business; and

(d) The expansion stage covers the substantial growth in the scale and market impact of the business.

7. The net cash flow of an innovative enterprise follows a distinct pattern over time, being negative at the seed and start-up stages before it becomes positive. Nascent innovative enterprises need to overcome their early-stage uncertainty in order to reveal or create their commercial potential.

8. Many of the traditional sources of early-stage finance are not fully suitable for innovative enterprises. Given the negative cash flow and high risk of failure at their early stages of development, innovative enterprises ideally need forms of financing that do not seek guaranteed repayment.

9. Two forms of finance are suitable for the early development stages of innovative enterprises:

(a) *Merit-based awards (grants)*. Enterprises receive funds unconditionally, i.e. the funds do not have to be repaid if the enterprise is not successful. Such funds can be used for early concept development or exploratory market research. This can provide important certification to the recipient enterprises when they subsequently seek to raise private capital for their further development.

(b) *External equity*. By receiving equity stakes in exchange for their capital, investors have claims on the residual value of the enterprise, sharing not only its upside potential but also its downside. Typical providers of external equity financing are business angels, seed funds and incubators, and venture capital funds (including private, corporate affiliates, or government-sponsored).

10. Any policy initiatives aimed at improving the environment for early-stage financing of innovative enterprises should consider the fundamental challenges associated with establishing markets for private financing as well as the more general challenges associated to public intervention.

11. These initiatives need to address the problem of simultaneity of three central inputs: (1) capital; (2) specialised financial intermediaries; and (3) entrepreneurs. Each of these elements can emerge and develop only if the other two are present.

12. Given the development stages of innovative enterprises, there are different clusters of financial intermediaries, each seeking to accomplish distinct goals, harnessing specific sources of capital and serving particular classes of entrepreneurs. Therefore, public interventions aimed at facilitating the emergence and development of such intermediaries requires understanding of the challenges that they face in raising capital, making investments, and obtaining proper returns that can sustain their activity.

II. FROM IDEAS TO START-UPS

13. It is difficult to predict whether a particular innovative enterprise will turn out to be successful on a large scale. The emergence and development of innovative companies requires a constellation of promising opportunities, sufficient allocation of financial resources, and access to operational, marketing, financial, and managerial expertise. This demands an innovation support system that continuously screens promising ideas and allocates increasing amounts of resources to the projects that gather momentum.

14. The establishment of such a system depends on the supply of ideas and on the efficient decision structure that evaluates, selects, and supports promising ideas. The sourcing and proper evaluation of these ideas requires both geographic and knowledge proximity.

15. Implementing an innovation support system needs an incentive framework for such agents to emerge and an overall coordination of these agents in order to ensure that all areas of the innovation enterprise spectrum are well covered. Public policy can be effective in implementing these tasks by means of both direct involvement and indirect incentives and support.

16. Formulating public policy initiatives should be based on the understanding of the distinct challenges to both potential entrepreneurs and investors in the early stages of the enterprise development process. Potential entrepreneurs face the challenge of generating, assessing, and developing promising ideas. Success requires feasibility assessment and understanding of the business development and funding process. In turn, potential investors need to select promising projects when they lack sufficient information, monitor the development of these projects to ensure that resources cease to flow to projects with poor prospects, and obtain returns commensurate with the risk of the funded projects.

17. Public initiatives can be designed to deal with one or more of these issues. But collectively, as part of a broader policy framework, they need to ensure that all challenges are addressed. Individual initiatives can comprise direct involvement with potential innovative enterprises, through provision of feasibility grants, promotion of relationships with research and development (R&D) institutions, and provision of business support services, and indirect involvement, through financial and technical support and incentives to specialised intermediaries such as microcredit institutions, business angels, and corporate venture capital units.

18. Feasibility grants provided by public agencies are an effective source of seed financing for innovative companies. The ultimate goal of such programmes is to enable the transformation of innovative ideas into proposals that can generate a strong supply of investment opportunities to private investors and eventually develop into enterprises with large economic and social impact. However, such programmes are susceptible to political and bureaucratic influences that may interfere with the soundness of the business decisions.

19. There are several areas that need to be properly addressed for such programmes to achieve their intended goals:

- (a) Structure of the decision making process (i.e. who makes the funding decisions?);

- (b) Decision criteria (nature and consistency across decision agents);
- (c) Certification to private investors (i.e. will they perceive the grants as positive signals?);
- (d) Monitoring and support of selected projects;
- (e) Proper programme evaluation measures; and
- (f) Ensuring quality deal flow.

20. The commercialisation of cutting-edge scientific knowledge through the establishment of innovative, technology-based enterprises requires effective integration and information exchange between public R&D and business and educational institutions.

21. Relationships between businesses and public R&D institutions can be fostered in different ways:

- (a) Education of faculty staff and researchers on possible entrepreneurial opportunities, the process involved in developing these opportunities, and the available resources for the pursuit of these opportunities;
- (b) Provision of information to business partners on the nature and possible application of the scientific knowledge developed in public R&D institutions;
- (c) Granting technical and financial support for the early exploration of ideas; and
- (d) Provision of technical and financial assistance for the incubation of promising enterprises.

22. A number of specific intermediaries can be used to develop these relationships:

- (a) Technology transfer offices or cooperation networks among R&D, business, and educational institutions;
- (b) Specialised service intermediaries; and
- (c) Technology incubators or innovation accelerators.

23. Special attention should be devoted to the ability of supported enterprises to attract follow-up financing once they “graduate” from the support provided by these intermediaries.

24. Business support services can help entrepreneurs to overcome the initial challenges in the development of a company. These services can serve as platforms for ensuring the “investment readiness” of their recipients in terms of the entrepreneurs’ preparing suitable business plans and understanding the different sources of finance available to their businesses at different stages of development.

25. There is a wide range of services that can be provided to potential enterprises, based on the following goals:

- (a) Awareness raising (information to generate and support business opportunities);
- (b) Networking (i.e. promoting contacts between various stakeholders);
- (c) Match-making (matching entrepreneurs with sources of expertise and funding);
- (d) Training in feasibility studies and business planning; and
- (e) Coaching (i.e. guidance through feasibility studies and business planning).

26. The provision of small loans (microcredits) is a suitable instrument to support initial concept development or feasibility studies. Due to the combination of high transaction costs and small loan amounts, such loans are uneconomical for most banks and are often granted by specialised microfinance institutions (MFIs). MFIs use different appraisal methods, have different collateral requirements, and may also provide business advice and support.

27. Various instruments can be used to increase the flow of microcredits to eligible entrepreneurs:

(a) Provision of grants and technical support to defined MFIs to provide initial capital or offset the high costs inherent to their microlending activities;

(b) Direct financing or co-financing of projects that have been initiated by MFI or other eligible microcredit organizations;

(c) Provision of microloan guarantees to encourage currently non-involved financial institutions to engage in microlending; and

(d) Provision of tax incentives for microlenders or for their third-party capital providers. Such incentives can improve the cost efficiency of the MFI and enhance their stand-alone viability.

28. The effectiveness of these instruments in advancing the overall mission of promoting innovative enterprises depends on:

(a) Effective credit assessment procedures that reduce the ratio of operating costs to loans;

(b) A clear specification of the types of enterprises to be supported – down to operational definitions to be used by field loan officers in appraising potential applicants;

(c) Operation in close proximity to places where innovative enterprises originate, such as universities and research institutions; and

(d) Possession of specific business, analytical, or technology knowledge and skills related to the appraisal of the feasibility and preparation of plans for innovative enterprises.

29. Business angels play a critical role in financing the early development of innovative companies. Business angels are individuals that make equity investments in promising ventures. For many angels, the source of their wealth is the sale of businesses that they had founded and operated. They can provide a substantial portion of the seed and start-up capital to entrepreneurial ventures, including through syndicated deals involving several angels.

30. Business angels provide not only capital but also:

(a) Facilitate valuable strategic, operational, and market advice based on their extensive business and entrepreneurial experience; and

(b) Introduce the entrepreneur to major stakeholders such as customers and suppliers.

31. Information between business angels and entrepreneurs does not flow easily. Business angel networks (BANs) have emerged in recent years to address this market and information inefficiency as well as provide value added services to both individual angels and entrepreneurs. BANs pool the financial, knowledge and information resources of groups of angels to become

more visible to prospective entrepreneurs, to attract bigger deal flow and thus sift better-quality deals, and to apply more formal screening and investment selection.

32. The key services rendered by BAN include:

- (a) Matchmaking through networking events or investment forums;
- (b) Business plan coaching to prospective entrepreneurs;
- (c) Training to participating investors and entrepreneurs;
- (d) Syndication support and set-up of co-investment funds; and
- (e) Liaising with other finance providers for co-investment opportunities.

33. Investment by business angels depends on a number of factors, which can be influenced by policy interventions:

(a) *Return potential*: The returns to private investments depend on the quality of recipient enterprises, the availability of subsequent private growth capital to spur the large-scale development of these enterprises, and the conditions under which the business angel can exit their investments.

(b) *Supply of high-quality entrepreneurial enterprises*: Business angels can be discouraged by the limited number of deals meeting their investment criteria as well as by the poor quality of the investment proposals they receive.

(c) *Tax conditions*: The availability of income, capital gains, and dividend tax relief for private investments can provide a strong incentive for investing in private enterprises.

(d) *Economic conditions*: Economic growth, interest rates and inflation can affect angel activity by increasing or decreasing the returns to be made on alternative investment opportunities.

(e) *Stock market conditions*: Stock market movements and expectations can affect the amount available for private investments as well as the opportunity cost of such investments.

34. Policy initiatives that aim to increase the supply of high-quality innovative enterprises can have a spillover effect on business angel activity. In addition, there are several possible policy instruments that can be used to encourage business angel activity:

(a) Tax incentives, including tax rebates or deductions and exemption or deferral of capital gains on investments in specific types of company;

(b) Technical or financial support for the establishment and expansion of BANs, particularly in regions where such networks do not yet exist;

(c) Technical or financial assistance for business angel training in standalone facilities or through BANs; and

(d) Financial leverage instruments such as co-investments with business angels or business angel investment funds and allocation of capital to business angel investment funds, based on the attraction of certain amount of private capital.

35. Corporate venture capital refers to equity or equity-type investments by subsidiaries of non-financial corporations in private, entrepreneurial firms. Compared to traditional venture capital investors, corporate venture capital investors may be less concerned with financial returns

and more with the strategic value that the entrepreneurial firm may eventually bring to the parent organization.

36. Established companies look for innovative ideas and new opportunities, as part of their strategies to remain competitive. Various policy instruments can be used to attract them as partners in the financing and support of innovative enterprises:

- (a) Tax incentives for investments in private, innovative enterprises;
- (b) Public-private partnerships that involve financial participation; and
- (c) Establishment of administrative structures (such as industry-related incubators)

that facilitate the commercialisation of new ideas.

37. Direct instruments can increase the entrepreneurial awareness and skill sets of potential entrepreneurs located in R&D institutions as well as provide them with critical early means to explore the feasibility of their ideas. Indirect instruments can encourage and facilitate the involvement of other funding agents, such as microcredit agencies, business angels, and corporate venture capital funds, by improving the flow of information to them or providing them with support or incentives that ensure the economic viability of their investments in innovative enterprises.

III. EARLY-STAGE GROWTH

38. Once the commercial potential of the enterprise is deemed real, capturing it requires sufficient financial and technological resources as well as managerial and strategic skills. This demands the provision of special development capital that combines financial resources with managerial oversight and strategic expertise that traditional financial intermediaries cannot facilitate.

39. Venture capital (VC) financing pertains to the provision of professionally managed capital to promising enterprises in exchange for equity stakes, with the anticipation of selling those stakes in 5-7 years at substantial premiums once these enterprises reach certain developmental milestones or fulfil their commercial promise.

40. As providers of development capital, VC firms perform an important intermediary function: they channel funds from institutional investors to high-potential enterprises. Although institutional investors stand to benefit from portfolio diversification into private, innovative enterprises, they lack the expertise to select and help develop such enterprises.

41. A developed VC industry thus requires well functioning interfaces for the flow of funds from institutional investors to VC firms, from VC firms to high-potential enterprises, and from there back to the VC firms and institutional investors. Any interruption of that cycle can undermine the vitality and sustainability of the VC industry.

42. The characteristics of a typical private VC fund include:

- (a) *Structure.* Each fund is typically organized as a limited liability partnership (LLP), in which some or all of the VC firm managers act as general partners and provide a small

part (typically 1%) of the fund's capital. The rest of the capital is provided by institutional investors (e.g. pension funds, university endowments, banks or insurance companies) or wealthy individuals and family trusts, who serve as limited partners.

(b) *Term.* LLPs have a fixed-term life, typically 10-12 years. Transfer of partnership stakes and early withdrawals from the partnership before the termination date is prohibited.

(c) *Management.* The general partners make all investment and divestment decisions. Limited partners are prohibited from active management of the fund.

(d) *Distribution.* LLPs allow distributions to flow through the partnership structure to the limited partners and be taxed at the limited partners. The exact tax treatment of LLPs varies across countries.

(e) *Compensation.* The VC firm typically receives an annual management fee of 2-2.5% of the committed capital for the life of the fund and 20%-25% of the distribution to the partners beyond a minimum (the nominal amount plus a statutory minimum return).

43. VC managers use a multi-stage process to select investment opportunities. They monitor the progress and potential of their portfolio companies, and provide staged infusion of capital, tied to the achievement of specific milestones. Finally, VC investors add value to their portfolio companies by providing strategic and managerial advice, network contacts and playing an active role in the recruitment and professionalization of management.

44. The venture capital financing process is essentially a cycle through which money flows: from institutional investors to VC funds, from VC funds to promising entrepreneurial companies, from the entrepreneurial companies back to the VC funds, and from the VC funds back to the institutional investors. This self-reinforcing cycle consists of four main stages: fund-raising, investing, managing / value adding, and exiting.

45. While each of these stages can be viewed as a policy lever, all four stages need to be developed and active for the early-stage VC financing process to function and create its impact. Each lever needs to be attuned to the specific needs of the VC firms it aims to attract.

46. Because VC firms do not invest their own funds, fundraising is a critical component of the VC cycle. For external investors, allocating funds to VC firms makes economic sense only to the extent that the returns achieved by VC firms exceed the investors' opportunity costs and adequately compensate them for the undertaken risks.

47. There are several formal tax and regulatory issues that determine whether venture capital is a suitable class for asset allocation and whether venture capital funds will be allocated to early-stage enterprises. Policy interventions in the area of early-stage financing should be mindful of the implications of different tax and regulatory set-ups.

48. The existence of a dedicated or suitable structure for raising capital from institutional investors is of vital importance for avoiding double taxation and deferring tax liabilities until securities are actually sold. Tax regulations such as permanent establishment exemption (under which funds by international investors are not subject to local country tax) and capital gains tax can have a direct impact on investor returns.

49. Convertible preferred shares play an important role in aligning the interests between investors and managers, and can provide powerful incentives if subject to favourable tax treatments. The applicability of convertible preferred stock in a given country depends on whether the local rule of law can enforce its contractual protection and the tax rules related to the valuation of convertible securities and treatment of stock options.

50. Many institutional investors – and especially those handling public or regulated funds – are subject to explicit quantitative restrictions for allocation to “alternative” asset classes such as venture capital (private equity). In addition, such investors also need to comply with “safe haven” and “prudent man” rules that guide investment decisions. Public regulations in this area can affect the fundraising possibilities of VC.

51. Investment allocation decisions by VC are affected by a range of factors:

(a) Local institutional investors may have insufficient knowledge of the VC industry, the nature of VC investing, and the return profile of VC funds. Such knowledge can be provided by specialised gatekeepers or investment advisors, supported by public initiatives.

(b) The degree to which local VC firms possess skills and social capital relevant for managing innovative enterprises depends on the availability of career paths from high-technology industries to VC firms, as well as on the mobility of VC managers across firms and countries.

(c) Institutional investors can be concerned about the prospects of funds that are newly established or led by relatively inexperienced managers. The presence of cornerstone investors (such as government agencies) or the establishment of public-private partnerships can provide vital certification and compensate for investors’ risk aversion.

(d) Fund-raising goes through natural cycles of ebbs and flows, exposing the need for VC firms to provide follow-on financing to their portfolio companies during downturns in fund-raising. Public programmes can be deployed to offset this variability.

(e) VC investors seek to add value when they stand to gain from the upside swings of their investments. The inability to participate in follow-on rounds due to small fund size can lead to subsequent dilution of ownership stake and thus to reduced return potential. Public programmes can employ specific instruments to leverage the VC firms’ returns.

52. In addition to VC firms, more traditional financial intermediaries, such as banks, can play a role in the financing of innovative enterprises. However, early-stage companies do not have a historical performance or tangible assets while cash flows are negative or volatile. Specific instruments of support are necessary to entice these lenders to support the early-stage growth of innovative enterprises.

53. Public or private financial instruments can be implemented in ways that improve the risk – return parameters to bank lenders through various forms of credit enhancements. In the absence of sharing the upside gains of the supported enterprises, these instruments protect finance providers against potential losses.

54. Guarantees by third parties are an external form of credit enhancement, whereby such parties (e.g. insurers or government agencies) promise to reimburse investors (lenders) for losses

up to a pre-specified amount incurred due to the borrower's defaulting on a loan or other payment obligations.

55. Guarantees eliminate or mitigate the risk for the lending institution but they pose challenges to the administering government agency regarding potential adverse selection and moral hazard problems. Eligibility criteria need to be clearly specified so that only the group of intended recipients receive such guarantees. Effective selection criteria are required to ensure that entrepreneurs will put their best efforts towards establishing and growing their business and that an element of risk remains.

56. Credit enhancement can be provided in partnership with private institutions. Public agencies can assist in the establishment or funding of such institutions. Public agencies can provide counter-guarantees to or co-guarantees with private companies that act as third-party guarantors.

57. The early-growth of innovative enterprises requires both sufficient capital and proper management expertise. Public policy can play an important role in facilitating the flow of growth and development capital to innovative enterprises by engaging both venture capital firms and traditional financing institutions.

58. Venture capital firms can perform a vital intermediary function in connecting capital from institutional investors with high-potential enterprises. But the scale, scope, and quality of their activity depend on a smooth transition through four stages of the VC process: fund-raising, investing, value adding, and exiting. Policy initiatives can target any of the deficient areas in the cycle but the effectiveness of such interventions ultimately depends on the coordination of efforts through this cycle.

59. Three of the stages – fund-raising, investing and exiting –require an enabling regulatory and tax environment, strong supply of innovative enterprises, and public capital markets receptive to such enterprises. This suggests that efforts to develop a VC industry should be part of a more comprehensive innovation policy.

IV. FINANCIAL DEVELOPMENT AND PUBLIC CAPITAL MARKETS

60. Well functioning stock exchanges are instrumental for the development of innovative companies because they can provide both fresh capital for their large-scale expansion and new product development and opportunity for the seed and early-stage investors to trade their stakes, realize capital gains (or losses), and ultimately redeploy their capital into new investment opportunities.

61. The same challenges that innovative enterprises pose to prospective investors also limit their suitability for traditional stock exchanges. More flexible regulations and operations are required to meet the needs of younger, high-growth enterprises.

62. Stock markets can provide liquidity for private investors and have served as major pillars for the development of VC industries. Two components of stock exchange activity are particularly relevant for the financing of innovation:

(a) *Initial public offerings (IPO)*. An IPO is the issue of new stock by a once private company, whereby it transforms itself into a publicly held one. IPOs are used to raise growth or expansion capital for companies (young or established) that have capital requirements that are too large or too costly for the private owners to provide.

(b) *Secondary market*. When stocks or bonds are traded or resold, these transactions take place on a secondary market. Its proper functioning requires sufficient trading liquidity, i.e. many ready and willing buyers and sellers. A stock exchange can suffer from low liquidity if it lacks sufficient scale or impedes trading by institutional investors, including foreign ones.

63. There are several common areas of regulation that affect the degree to which a country's public markets can meet the needs of younger, high-growth enterprises:

(a) Listing requirements, including minimum market capitalization, sufficient working capital for a period of time, etc.

(b) Companies seeking listing on a public stock exchange need to register with the respective regulatory Commission and meet certain disclosure and legal compliance requirements.

(c) At the IPO, certain securities may be subject to trading restrictions for a certain period of time, which reduces their attractiveness.

(d) Once listed on a stock exchange, companies need to provide periodically information to the public related to their operating and financial results and business prospects.

(e) The prevailing legal regime and the degree of law enforcement can influence the degree of investor protection.

64. Several stock exchanges have emerged to provide financing for small and medium-sized business, particularly those that are innovative and growth oriented. Their "junior" characterization comes from their affiliation with major stock exchanges and from their offering of rules and regulations tailored for high-potential companies.

65. These emerging markets for small and medium-sized companies are increasingly shifting their strategic focus to international/pan-European activity in order to broaden their investor base and achieve higher trading liquidity. In addition, with the rapid internationalization of market activity, especially for innovative enterprises, and growing economic integration, the "home bias" towards domestic exchanges is beginning to dissipate.

66. There are several areas in which policy initiatives related to the promotion of innovative enterprise can – alone or in partnerships with the private stakeholders – support cross-border exits:

(a) Facilitation of information exchange and increased awareness of the capital market possibilities offered by the junior exchanges. Such efforts can be directed towards both institutional investors (to increase trading liquidity) and potential or current entrepreneurs (to increase the number of new listings); and

(b) Training of support service providers such as stock analysis, consultants, and gatekeepers to develop and disseminate specialised knowledge of the needs, regulations, and opportunities for small and medium enterprises.

67. Trade sales, although on average less lucrative and less visible, represent a more frequent form of exit for business angels and venture capital firms. For established companies, acquisitions represent an important option for enhanced competitiveness and strategic renewal. The actual opportunities for acquisitions in turn depend on the existing firms' abilities to both identify promising acquisition targets and finance the actual acquisitions.

68. A favourable environment for trade sales is defined by:

(a) A supply of high-quality innovative enterprises, offering products or services that could potentially enhance the revenue streams of established companies;

(b) The existence of active and internationally oriented investment banking and consulting communities; and

(c) The existence of active stock markets, particularly those better attuned to the needs of new, innovative, high-growth enterprises.

69. Public capital markets can provide closure to the innovation process by facilitating the recycling of capital from one generation of innovative enterprises to the next. Given the distinct needs and characteristics of innovative enterprises, several specialised, "junior" stock exchanges have emerged to facilitate the flow of funds to such enterprises.

70. The ultimate success of these exchanges depends on their scale and trading liquidity, which in turn depends on their abilities to span geographical boundaries, attract institutional investors, and develop a network of specialised service providers.

71. Public policy can play a supporting role in this process by facilitating (1) the scaling up of domestic exchanges by attracting foreign investors and enterprises and encouraging the development of a support network of analysts, investment bankers, and consultants, and (2) the access of domestic enterprises to foreign exchanges by increasing their awareness of the opportunities offered by these exchanges.

V. GENERAL CONCLUSIONS

72. Effective public policy for promoting the emergence, development, and financing of innovative enterprises requires profound understanding of the environment in which innovative enterprises emerge and thrive and the factors that sustain them through their various stages of development. Each individual initiative or instrument is part of a broader picture – and an integrated framework that needs to be put together to define effective interventions.

73. The emergence and effective functioning of markets for private financing of innovative enterprises requires the simultaneous presence of several conditions: capital, specialised financial intermediaries, and entrepreneurs.

74. Given the distinct development stages of innovative enterprises, there are different types of financial intermediaries, each seeking to accomplish distinct goals, harnessing distinct sources of capital and serving particular classes of entrepreneurs:

(a) Seed-stage intermediaries such as incubators, grant programmes or microcredit institutions need to engage as many potential entrepreneurs as possible in a way that can efficiently identify promising entrepreneurial ideas;

(b) Start-up-stage intermediaries such as seed funds and business angels take the promising ventures through the hurdles of product development and initial market testing to reveal small-scale commercial success.

(c) Early-growth and expansion-stage intermediaries such as venture capital funds can fire up the growth process by accessing and deploying larger amounts of capital and providing critical management expertise and social capital to the new venture.

75. For each development stage and financial intermediary, there are four interfaces that ensure that the three components (capital, intermediaries, and entrepreneurs) engage and operate in a self-propelling, cyclical process. All four levers need to be developed and active for the financing process to function and create its impact. Financial intermediaries need to:

(a) Have access to sufficient amounts of capital (fund-raising);

(b) Be able to allocate that capital to promising enterprises (investing);

(c) Provide appropriate value added to these enterprises, to enhance their potential for success (value adding); and

(d) Be able to liquidate their investments and re-deploy their capital to a new wave of enterprises (exiting).

76. Government programmes can employ several different generic modes of allocating resources and providing incentives that ultimately lead to increased supply of innovative enterprises and larger mobilization of private funds for the financing of these enterprises. Each of these instruments seeks to create conditions for the engagement of private companies into a well functioning market for private financing.

77. The involvement of the private sector in public early-stage financing initiatives is critical, not just as a way to increase the resources available but also to ensure that appropriate professional expertise can be relied upon on the management of public schemes.

78. Policy initiatives need to be both effective and efficient, i.e. it needs to be clear that innovative enterprises do emerge as a result of their implementation and that the economic and social benefits these enterprises bring outweigh the cost of the initiatives. Determining whether this is the case is not an easy task. Therefore, successful programmes require both careful design – that anticipates and averts possible challenges and conflicts of interest – and attentive monitoring of operations and results.

79. Some of the areas that need special consideration in the design and monitoring of programmes include:

(a) *Displacement of private funding.* Would an enterprise have been able to obtain funding if the public programme were not in place?

(b) *Targeting the right recipients.* If left to be interpreted by individual agents, the term “innovative enterprise” could apply potentially to a diverse group of enterprises. Carefully

derived and tested operational definitions are essential for guiding field decision makers towards supporting the desired group of enterprises.

(c) *Measuring success.* Success can be defined in many different ways – survival, growth, profitability, social impact, etc. – and apply to short or long-term time frames. Employing a common metric of success is important for comparing different programmes, but excessive focus on a particular indicator can also distract from other, longer-term aspects in which an enterprise can benefit the economy and society.

80. Synergies and complementarities among various programmes deserve special attention, in particular if they are run by different agencies. A country's set of initiatives can be effective only to the extent that it addresses all the inactive components of the private finance markets. This requires high-level coordination of policies in the areas of regulation, tax, innovation, and early-stage financing. Coordinated approaches should introduce schemes that build on previous experiences or seek to complement concurrent programmes. Financial assistance is often more effective when provided together with business support services.

81. Comprehensiveness and coordination can be facilitated by instituting effective policy learning mechanisms that can take advantage of both the local and other countries' policy experience. Such mechanisms require careful understanding of the goals and results from previous policy interventions, which in turn require proper and effective measurement and evaluation of programme outcomes.

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