United Nations ECE/CECI/2010/6

Economic and Social Council

Distr.: General
14 September 2010

Original: English

Economic Commission for Europe

Committee on Economic Cooperation and Integration

Fifth session
Geneva, 1-3 December 2010
Item 4 (d) of the provisional agenda
Status of programme implementation:
Promoting an enabling environment for efficient financial intermediation in support of innovative development

Synopsis of good practices and policies to address financial and entrepreneurial challenges in high-growth innovative firms

Note by the secretariat

I. Introduction and summary

1. This Synopsis has been prepared in accordance with the Programme of Work of the Committee on Economic Cooperation and Integration for 2009-2010. The document builds on the discussions that took place during the International Conference on Policies to Address Financing and Entrepreneurial Challenges in High-growth Innovative Firms (ECE/CECI/CONF.7/2). The Conference, which was held in Helsinki on 2-4 June 2010, was organized by the UNECE in cooperation with the Ministry of Employment and the Economy and the Ministry of Foreign Affairs of Finland.

2. In modern economies, a small percentage of new companies account for the bulk of job creation. These high-growth firms, which according to widely used definitions are those with an annual growth in employment or turnover exceeding 20% for three consecutive years, tend to display higher productivity rates and therefore have a disproportionate impact on economic activity. In addition, these companies are critical in driving innovation because existing organizations are reluctant to adopt radical changes that may negate the value of their existing assets or business models. Disruptive innovations find a more fertile ground on these high-growth firms.

3. Given the importance of these firms for economic dynamism and prosperity, its development has emerged as an important policy target. This document presents some of the main relevant policy issues and good practices that can be derived from the experience of UNECE Member States. Its structure reflects the policy areas that were the main focus of the Helsinki International Conference. First, it presents a general discussion of policies

promoting innovative high-growth entrepreneurship, with particular consideration to the challenges that have emerged during the economic crisis and the lessons that may be drawn. Second, it discusses the role of different types of collaborative arrangements to foster innovation and the requirements for their success. Finally, it introduces the particular challenges that high-growth innovative enterprises face in raising finance and various policy experiences to address them in an effective way.

II. Nurturing high-growth firms: policy challenges

4. There are many factors that influence entrepreneurship, including the regulatory framework, market conditions, access to finance, creation and diffusion of knowledge, entrepreneurship capabilities and culture. General framework conditions for economic activity, such as macroeconomic stability or the development of infrastructure are also important determinants of entrepreneurial success.

5. Given this varied and complex set of factors, an improved understanding of how these elements affect the emergence and development of new firms contributes to the capacity of policymakers and other stakeholders put in practice effective supportive measures. This understanding should be backed by statistical and benchmarking tools to assess the impact of actions in different policy areas.

6. It is important that policies distinguish between small and medium enterprises (SMEs) that will remain small or disappear and those that are driven by high-growth entrepreneurs. From a policy perspective, a difference should be made between supporting new firm creation and new firm growth. Increasing the number of firms does not necessarily translate into significant jobs expansion, if the firms created are not of high-quality.

7. Nurturing high-growth firms requires specific policies that go beyond those that may be required to support the development of entrepreneurial activity. More focussed policies are necessary to address the specific challenges faced by high-growth companies, with an emphasis that lies not on the quantity of new firms but on their quality. A focus on high-growth companies may require more selective entrepreneurship policies but this raises the challenge of how to identify these firms with high potential effectively.

8. In high-growth companies, a continued commitment to innovation is an essential driver of their expansion. Many studies support the notion that a key factor explaining the difference between faster and slower growing firms is innovation. However, there is a need to avoid an excessively restrictive view of innovative entrepreneurship, which should encompass not only high-tech and knowledge-intensive companies but also other instances of radical innovation that challenge existing firms and create new economic opportunities.

9. In doing this, an appropriate balance should be found between the aim to continue improving framework conditions, which have a more general significance but also benefit high-growth firms, and more specific policies targeting innovation.

10. The success of high-growth companies depends on:

(a) Internal factors such as managerial competences and technical expertise; and

(b) The ability of these firms to operate in an environment where they have access to necessary external resources, including high-quality business services.

11. The importance of both internal and external factors should be recognized in policy interventions, which should target not only the firms but also the environment in which they operate. This dual approach would serve to better diagnose problems and design measures that can generate effective synergies.

12. Skills play an important role in explaining the performance of high-growth enterprises. These companies need to have access to qualified staff, including through the ability to hire skilled foreign workers if required. High educational standards should be a permanent focus of public policies, which need to include also lifelong learning initiatives.

13. Entrepreneurs in high-growth companies are often highly educated individuals, so measures that facilitate career mobility may have a positive effect on the emergence of this type of ventures. Interventions in this area may encompass general features of the pension and health provision systems and labour market regulations.

14. High-growth firms thrive when they find favourable conditions for expansion. Policies can facilitate the development of these firms by increasing the size of potential markets, reducing barriers and coordinating standards that facilitate entering new markets. Deregulation may also create new opportunities that can be seized by these dynamic firms.

15. Internationalization is always difficult for SMEs but access to foreign markets is essential for high-growth firms to reach their potential. Public initiatives can support these efforts through a variety of means, both at the national and international levels. At the national level, public schemes can help businesses to gather information on foreign markets, which is always costly for the individual firm. At the international level, a commitment to open markets, including through the avoidance of discriminatory public procurement procedures, contribute to create conducive conditions for international expansion.

16. Foreign markets provide not only opportunities for growth but also facilitate access to technology. Imports of knowledge-intensive products are an important channel for the dissemination of innovation across borders, thus eventually increasing domestic innovation capabilities. Policies should be mindful of these positive effects and not create unnecessary barriers.

17. Public research and development (R&D) is a key catalyst for related private spending and a source of quality inputs and business opportunities for smaller companies. Public R&D is particularly important in maintaining innovation activity during economic slowdowns, as this creates the basis for future growth. This lesson, which is backed by the experience of a number of countries, is especially pertinent in current conditions, as the financial pressures created by the worldwide economic crisis is resulting in a drive for fiscal austerity.

18. It is important to note that countries find themselves in different positions in relation to the technological frontier, which has implications for R&D policies. In countries with economies in transition, the prevalence of public R&D creates particular challenges to ensure that such spending reflects market needs.

19. Generation of new knowledge and its dissemination across the economy are enhanced by the development of an effective innovation infrastructure, including a network of business incubators, science, technology and research parks. Different types of tax benefits, subsidies and other forms of public support can be granted to these elements of the innovation infrastructure. The effectiveness of these mechanisms of support is enhanced when they are coordinated closely with different programmes for SMEs development.

20. High-growth innovative firms develop and respond to market opportunities. Therefore, the emphasis on policies should be not only on the generation of new knowledge but on the diffusion of this new knowledge, including through policies that raise the capacity of these firms to absorb new technology.

21. Technology diffusion programmes need to be customer-oriented and contribute to increase the demand for technology and innovation in targeted firms, including through their contribution to raising awareness on the value of innovation. In order to ensure its

effectiveness, it is important that these programmes are based on a good understanding of the relations between the various stakeholders of the national innovation system, which would make possible the identification of the appropriate delivery channels and the most suitable targets for intervention.

22. These technology diffusion programmes may have different objectives, including:

(a) Improving the adoption of specific technologies, in many cases targeting specific sectors;

(b) Enhancing the general technology skills of companies, thus supporting their ability to diagnose their technology needs; and

(c) Developing the innovation capacity of firms, which may help companies to develop innovation-oriented strategic management while increasing their skill base.

23. Intermediary organizations with public funding can be used to increase the innovation ability of high-growth companies, providing specialized advice and helping to connect them with other innovation stakeholders.

24. Public demand is widely recognized as an effective tool to increase the demand for innovation. However, it is important to ensure that public procurement mechanisms do not implicitly discriminate against SMEs, putting them at disadvantage by including requirements that are difficult to fulfil. By contrast, public procurement should actively encourage the formation of consortia or other forms of collaborative arrangements that facilitate the access of SMEs to public contracts.

25. Authorities should remain vigilant to the impact of new regulations on the business environment and, in particular, on high-growth firms. Regulations have a disproportionate impact on SMEs because, given their size, they are less prepared to bear these costs, which have a larger relative significance for them in comparison with established firms. Regulations can be particularly damaging for flexibility, which is a major competitive strength of high-growth companies. As high-growth firms activities involve significant commercial and, in some case, technological risks, they may be particularly sensitive to the additional uncertainties created by changing regulations.

26. Auditing and monitoring of new legislation, as adopted in some countries, is a good practice that contributes to ensuring that no unnecessary obstacles constraining the development of private business are introduced. In particular, regulations that limit competition and discourage entry by new dynamic companies should be carefully scrutinized.

27. Public authorities should strive to facilitate access to information by SMEs and, in particular high-growth companies, concerning regulations, so to facilitate compliance without imposing unduly costs.

28. Broadly speaking, governments have an important role to play providing different types of public goods related to access to knowledge and the development of networks, thus overcoming coordination problems in the private sector. The close involvement of the private sector in designing and developing these initiatives is important to ensure that their needs are appropriately recognized and addressed.

29. Differences in institutions and the level of economic development should be considered when trying to identify the types of policies that are appropriate. While international experience creates significant opportunities for policy learning, there is a need to bear in mind specific national contexts and needs. This requirement concerns not only the intermediate targets that are pursued when promoting innovative high-growth enterprises but also the choice of instruments and the mechanisms of delivery.

30. Strategies and policies should have a time horizon that is long enough to yield results, while providing the necessary stability so the arrangements put in place are well understood by private sector participants. Budgetary allocations should fit the targets that are being pursued. Appropriate delivery mechanisms, which rely on an infrastructure that is consistent with the envisaged targets and modalities of intervention, should be an essential part of policy design.

31. Programmes targeting high-growth firms should be subject to strong quality control requirements and on-going monitoring of their effectiveness. A key factor in this assessment is their continuous responsiveness to customer needs.

32. Entrepreneurship policies targeting high-growth entrepreneurs depend on a complex number of factors. Therefore, these interventions should be comprehensive and consider both demand and supply elements, while working together with the private sector and exploiting synergies between the activities of different government departments and agencies.

33. There is a need to develop a coherent and comprehensive framework that addresses all relevant issues in a systematic matter, including those concerning the coordination of the activities of various government layers. Policies should not be assessed on isolation but as part of complex sets of interventions.

III. The role of cooperation in promoting innovation: best practices

34. Innovation activities do not emerge in a vacuum. High-growth firms rely on other firms, as suppliers or partners, to create competitive commercial proposals. Proximity to research and education institutions facilitates access to specialized knowledge and highly skilled staff. Customers, suppliers and competititors are often the most important sources of new ideas.

35. Successful companies often combine available knowledge or technical solutions in novel ways that improve existing products or services or create new commercial concepts. High-growth firms, which are flexible and inventive, are particularly adept at exploiting the potential of existing technologies, despite the fact that they do not have the resources to conduct themselves large-scale R&D activities.

36. High-growth firms need to be closely connected with research efforts conducted elsewhere, so they can tap into this potential to anticipate and respond to market needs. This concerns not only relations with public education and research institutions but also with established large companies.

37. Different types of public-private partnerships should be developed to create close links between the research base and the industry. This would facilitate pooling resources, sharing knowledge, experiences and good practices and increasing mobility of researchers.

38. These arrangements should promote the development of bridging institutions, supported by a system of incentives that favours collaboration and coordination between various innovation stakeholders in both the private and public sectors. These institutions can help to increase the degree of connectivity of the national innovation system, through network effects, an effective system of referrals and the dissemination of information. These institutions can also be formed along sectoral lines in order to increase their effectiveness and focus.

39. There is wide national diversity of institutional arrangements regarding research, reflecting different historical traditions and multiple priorities in science and technology

policies. Despite these variations, good practices in this area share an emphasis on decentralization, the role of appropriate incentives and the importance of mixed systems of financing as creating better conditions for closer relations between science and industry. Policies should support the role of research institutions as a key element of knowledge markets and active contributors to the creation and exploitation of business opportunities.

40. In many countries, there are schemes that facilitate joint technological projects between the private sector and public research institutions or encourage the mobility of researchers. However, it is important that such initiatives are open to small enterprises and actively seek to associate them into these projects. New business models and radical forms of innovation are likely to find more fertile ground in these dynamic firms, which enjoy more flexibility to explore new possibilities.

41. Innovation vouchers, which allow companies to purchase support from research institutions to explore potential opportunities for further collaboration, have been used in some countries, specifically targeting SMEs. These are demand-based mechanisms that in a flexible way have served to encourage relations between the research base and SMEs.

42. The development of networks is important for innovation as these collaborative arrangements allow sharing risks and pooling resources. However, despite their wider social benefits, private costs may be substantial, so public involvement may be necessary to promote the formation of networks. Potential participants may be not fully aware of the benefits of collaboration and because of this, they are not able to share the costs involved in the formation of these networks.

43. Public programmes can also encourage the interaction between various types of enterprises by providing financial support to projects that are submitted by networks of companies, including consortia formed by established large companies and SMEs. Collaboration may be horizontal, involving similar groups of companies, or vertical, encompassing the whole technology chain from the research base to the commercialisation of new products.

44. The public sector may provide support to formal organization structures but concrete arrangements are better left to participants. Good practices in this area show that best results are obtained when public programmes are built on the basis of self-organization principles, rather than taking a top-down approach.

45. Initiatives to promote networks should acknowledge that building trust takes time, so continued commitment and stability are essential. As benefits become apparent and well established networks emerge, the rationale for public involvement will diminish and, therefore, policy interventions should incorporate clear monitoring mechanisms and exit criteria for the withdrawal or reduction of initial support.

46. Specialized intermediaries can play an important role as matchmakers and facilitators. However, policies should also help individual enterprises to asses and develop their network management skills and competences. Public schemes can provide information in these areas and help to disseminate good organizational practices with the support of specialized consultancy services.

47. Intellectual property issues play a prominent role in ensuring effective forms of collaboration and should therefore be given due consideration in policy initiatives. Lack of awareness or inappropriate skills for intellectual property management are often stumbling blocks that prevent more fluid forms of collaboration. This should be addressed through continued attention to training both in public research institutions and SMEs. Training should be focussed and practical enough so participants can recognize its benefits.

48. The overall quality of the intellectual property system influences the willingness of stakeholders to enter into collaborative arrangements in the innovation process, as this

determines the scope for technology licensing, patent pooling and other arrangements. Efficient and well developed technology markets need appropriate intellectual property regulations. As part of the efforts to create favourable framework conditions for innovation, public authorities should strive to adopt suitable intellectual property regimes. Public initiatives can also help to develop information standards for intellectual property licensing and valuation and increasing the visibility of technology markets.

49. More broadly speaking, the development of technological standards can encourage new forms of specialization and facilitate collaboration between different companies. Standards can also have a direct impact on innovation, prompting the introduction of new products or services.

50. Collaboration across borders has a positive impact on innovation and should be encouraged. External demand in the form of projects with foreign partners may compensate for the lack of sophisticated local demand. Multinationals are a channel for technology and skill transfer. Policies should promote the development of linkages between domestic SMEs and large foreign companies.

51. Firms benefit from the proximity of other high-growth companies, which facilitates access to specialized inputs, mobility of the workforce and other knowledge spillovers. Clusters are of particular importance to small firms, which cannot provide a number of specialized services in-house and have to rely on external providers. Clusters offer markets for skilled labour and other high-quality inputs. They also favour the circulation of information. Public support to the formation and development of clusters, including through infrastructure investment, can help companies to gain competitive advantages.

52. The development of clusters can also be seen as part of the policies that seek to strengthen relations between high-growth firms and the science base, as these links often take place over a defined territorial domain. Typical elements of the innovation infrastructure, such as science parks or business incubators, have a clear geographical dimension. Science parks are often created with the aim to encourage firms to relocate within the proximity of research institutions, strengthening the links between industry and science but often contributing also to achieve the aims of regional policies.

53. An important aspect of the definition and implementation of policies supporting high-growth firms is the election of the appropriate level for the delivery of these policies. Regional and local authorities are often better placed to identify and address the needs of these firms, since the public agencies at the sub-national level are able to establish closer contacts with them.

54. While national strategies can define general frameworks for intervention with general implications and can affect the overall business environment, it is important to obtain the input of lower levels of government and to engage them in the implementation of national programmes. The impact of national policies depends on the regional context in which they will be implemented. In many cases, regional and local programmes may be more effective than national initiatives when immediacy and recurrent contacts are of paramount importance.

IV. Financing high-growth firms

55. Innovative companies face particular difficulties in raising finance, as their future cashflows are difficult to predict and they have little collateral to pledge as a guarantee. New and young firms have non-existing or limited credit stories, which are important to facilitate access to financing.

56. High-growth firms offer the promise of large returns but they are not easy to identify by investors, so this is an area where risks are high. Given these challenges, public financing and other programmes of public support play an important role in facilitating access to finance by this type of firms. However, public resources cannot replace private financing in funding high-growth firms. The ultimate aim of public policies should be to create effective forms of partnership with the private sector resulting in increased private financing.

57. There are many different ways in which public interventions and policies can support access to finance by high growth firms. These can be:

(a) Indirect, such as changes in the fiscal regime for different types of investments or the rules concerning asset allocation in regulated institutional investors such as pension funds; and

(b) Direct, through public institutions such as development banks or working together with private providers through various types of hybrid funds.

58. In some countries, the recognition of the special difficulties of early-stage, research intensive firms has led to the creation of a special status for this type of companies, which brings a number of tax and regulatory benefits. By improving the operating conditions of these firms, such schemes may also have a positive influence on their ability to raise finance.

59. The financing requirements of high-growth firms and, accordingly, the appropriate funding mix, changes with the stages of development of these companies. Continued expansion of high-growth firms often requires sharing equity with outsiders, as this is commensurate with the risks involved. There may be scope for some borrowing but this needs to be supported by public schemes which reduce risks for private lenders and lower financing costs for SMEs.

60. Venture capital financing is often the only source of long-term capital for high-growth but risky firms. However, there is a tendency for venture capital funds to concentrate on relatively late stages of the life of a company, where deal sizes are larger and risks smaller.

61. Public policies should avoid an excessive focus on measures targeting the development of venture capital, which may be inappropriate to address the financing needs of very early-stage companies. In order to generate a pipeline of deals that can be eventually considered by venture capital firms, there is a need for:

(a) Direct public financing in the form of grants, so ideas with potential can be explored and developed before they can attract private financing; and

(b) The promotion of other specialized financial intermediaries, such as business angels, who can consider smaller deals and help companies to grow to a size that allows them to attract venture capital financing.

62. The main role of public policy in this area is to reduce risks to private providers of financing, so to encourage them to engage actively with high-growth firms. However, in doing this, it is essential that the incentives for effective decisions are not distorted.

63. There are a number of dangers that public interventions should strive to avoid including:

(a) Selecting unsuitable managers, which may result in poor returns and therefore, a negative demonstration effect that discourages the involvement of private players. An excessive emphasis on guarantees may have this negative consequence; and

(b) Providing additional benefits to projects that would be financed by the private sector in the absence of public support.

64. Besides reducing risk for private sector involvement, public programmes can contribute to:

(a) Developing specialized financial intermediaries, through the support to the emergence of complementary business services providers and professional and investors networks;

(b) Encouraging relations between different types of investors, in order that there is no discontinuity in the provision of finance through the various stages of the development of companies; and

(c) Facilitating interaction between investors and companies through support to platforms for networking, such as venture fairs.

65. Tax policies that reward long-term investment and entrepreneurial-risk taking can have positive effects on the development of the venture capital industry. Legal and regulatory reforms can also facilitate fundraising by venture capital firms, encouraging pension funds and other institutional investors to channel resources to these specialized financial intermediaries.

66. As the venture capital industry is global in scale, it is important that countries try to develop tax and regulatory policies that can offer the same competitive advantages that are available in the best environments.

67. Growth markets that provide an effective exit mechanism for investors are essential for the development of the venture capital industry. This is an aspect which should receive more attention, as it is often overlooked in policy initiatives in this area. In Europe, where there are too many small illiquid markets, this requires overcoming the existing fragmentation along national boundaries.

68. Trade sales may be an alternative to the existence of organized markets. Public initiatives should facilitate these transactions through appropriate tax and regulatory regimes and the creation of platforms for the dissemination of information.

69. Appropriate intellectual property rights management is important for innovative firms seeking external financing. Intellectual property rights provide a degree of protection from competition but they also facilitate funding, including through asset-based forms of financing. Investors can sell their stakes to other investors more easily when intellectual property rights are well defined and appropriately managed. Given the relevance of intellectual property issues, public initiatives should increase awareness of their implications for raising finance among both investors and young firms.

70. Supply-side policies, which aim to increase the amount and quality of investable projects, play an indirect but important role in facilitating access to finance. These public interventions may include educational programmes that foster entrepreneurship, cultivating competences that go beyond the emphasis on technology development to stress the creation of successful business models and applications. Public interventions may help companies to become “investment ready”, providing the necessary advice on how to deal more effectively with prospective investors.

71. In some countries, schemes that combine the provision of financial support with training and technical assistance to upgrade managerial and other capabilities have yielded positive results. The involvement of private investors in the design of these programmes can enhance their effectiveness.