1) Workshop Innovation and Clusters

"Innovation and Clusters"
Moderator: Ging Wong, Privy Council Office - Policy Research Initiative, Canada

- Brian Morgan, Cardiff Business School, United Kingdom
- Antonio Sfiligoj, Business Innovation Center Trieste, Sviluppo Italia, Italy
- Paul Frater, Industry New Zealand, New Zealand
- Paolo Annunziato, Confindustria, Italy
- Aldo Durante, Italian Club of Industrial Districts, Montebelluna, Italy

Mr. Ging Wong opened the session by providing a framework for discussion. In recent years, the OECD and LEED in particular have observed that:

- Increasing global economic integration itself leads to regional and local industrial agglomeration and specialisation;
- Innovative clusters are drivers of economic growth and a key policy tool for boosting competitiveness.

The following relationships are key to policy considerations. The public policy objective is to increase or sustain prosperity and economic performance. The resulting increase in the standard of living is built by growing the GDP and, in this case, the GDP per capita is the key indicator of prosperity. An analysis of the four component parts of GDP per capita leads to the conclusion that to increase prosperity and comparative advantage, there is a special need to increase the amount of output per hour worked (effectiveness or labour productivity) and to attract people to seek jobs and create jobs for all job seekers (utilisation – labour force participation and employment rates – or job creation).

Focusing upon effectiveness and utilisation recognises the need to ensure that the maximum number of people are working in highly productive jobs – best leverage for increasing GDP per capita in the long term. It is argued that these components of GDP per capita are influenced by product / process innovation, and productivity upgrading. In turn, innovation and upgrading require a critical capacity operating at the level of individual entrepreneurs, firms and clusters. Specifically, innovation and upgrading depend upon the capacity of industry-specific clusters to:

- Mobilise financial capital to build infrastructure (physical capital);
- Invest in skills and learning (human capital);
- Commercialise new ideas (R&D);
- Develop strategic links and networks for co-operation and competition (social capital).

Clusters as a factor of “quality” FDI attraction and retention:

Brian Morgan - Product / process innovation and productivity upgrading is often associated with “quality” FDI. However, in order to attract and retain FDI and for FDI to become a catalyst of local growth it should be “embedded”, “internalised” in the local economy. The key factors motivating inward investment are: skills, labour flexibility, access to competitive suppliers, labour costs, telecoms/ soft infrastructure, hard infrastructure sites. It is argued that clusters can significantly reduce the entry and operation costs for FDI, therefore if regional authorities want to attract FDI they have to support local clusters and successfully growing enterprises. Clusters, like great thinkers, are “born”- they can not be made, but their effectiveness in the growth process can be more successfully harnessed. Efficient innovation support services hold the key to cluster development. Hence the need for regional authorities to develop diagnostic
tools to identify the growth potential of companies operating within clusters to target resources. The findings of the Growth Firms project suggest that successful firms:

- utilise information technology effectively,
- are keen to innovate,
- are well networked,
- are export oriented,
- are focused on marketing,
- have management and skills development budget,
- have sound financial controls,
- are willing to absorb equity; and
- have “strategic leadership”.

**Innovation Support Services:**

Research and industry worlds are often failing to communicate adequately: the businesses need for innovation corresponds to solutions already developed by researchers but simply not structured into available offers. Italian Area Science Park, one of the leading multi-sectorial science parks in Europe, was introduced as an example of efficient innovation support services. The AREA currently groups 70 companies, centres and institutes with over 1600 persons. Sectors of activity: environment, biotechnology and diagnostics, chemistry and biochemistry, electronics and industrial automation, physics, aerospace and new materials, multimedia systems, biomedical technologies, telecommunications. AREA provides specialised services of technology transfer and dissemination of innovation to the economic and manufacturing sectors, services for enterprise quality management and safety, and highly-specialised training. The Park is managed by the AREA Science Park Consortium, a public body which members include the universities of Trieste and Udine, the National Research Council, leading local and national scientific institutions, as well as the Friuli-Venezia Giulia Region and the principal local public organisations of the region. Such a diversity of Consortium members guarantees the political and financial support of AREA activities.

In order to bridge the gap between those who produce knowledge and those who use it, the AREA Science Park Consortium:

- **Takes advantage of the offer of technology and know-how** in the region, using a permanent system for the transfer of know-how and innovation to the SMEs of the Friuli Venezia Giulia region. Through case studies on research results commercialisation and the launch of new knowledge-based enterprises, the foundations for permanent relationship between research and industry are laid.

- **Responds to the innovation requirements of enterprises**, by examining the potential needs of an enterprise and assisting to structure their demands. An information system is created making use of a network of contacts with institutions, research bodies and national and international consultancy, allowing the identification of professional expertise and know-how that can meet the innovation needs of enterprises and institutions in the region.

- **Encourages the dissemination of innovation**, offering enterprises online services that allow the retrieval of information, updating, and identification of new solutions to enhance business competitiveness. Special attention has been paid to information on patenting: the Centre PatLib Friuli-Venezia Giulia, managed by the Consortium, is an electronic library of patents and information on industries and technologies.

- **Fosters business internationalisation**: encouraging exchange of knowledge and creation of scientific and industrial partnerships, giving guidance in the execution of national and international programmes of technical and scientific co-operation, and assisting in their management.
Dissemination of innovation is carried out on a continuous basis throughout the region through targeted actions:

- Technology auditing: short-term consultancy, for analysis of an enterprise’s inadequacies and potential.
- Tutoring: support of an expert or research group in carrying out activities connected with innovation projects.
- Assessment of business proposals: for researchers and potential entrepreneurs who, having identified innovative products or developed new technologies, wish to assess the economic potential and probability of market success.
- Sector and multi-enterprise studies: close analysis of certain sectors that seem particularly interesting either because they are well represented in the area, feature development potential or, on the contrary, risk recession. These studies provide a detailed picture of market trends, competition, technologies and regulations.

Creation of knowledge-based enterprises: The Consortium is particularly active in the creation of knowledge-based enterprises, encouraging both the traditional route to spin-offs, and experimentation with new methods and procedures. In addition, the Consortium also runs special projects:

- QUASI-E Project: the goal is creation of enterprises with high technology-content, based on the commercialisation of know-how accumulated within university research laboratories. Current projects include: advanced systems for optimisation of transport, production of recombinant antibodies for use in diagnostics and pharmaceuticals, instruments for online simulation of complex products, filtering of information found on the Web.
- OUTSOURCING Project: the Consortium encourages outsourcing - especially by larger enterprises - of operations that have high technology-content but depart from the company’s core business. The aim is to facilitate this process and thereby encourage the creation of highly specialised enterprises able to operate on the international and national markets.

“Catalyst” organisations:

Antonio Sfiligoj presented two innovation case studies – a Marina cluster responding to market forces while Nanotechnology cluster requires strategic support services. In both cases the role of a “catalyst” organisation was critical. A “catalyst” is a team of multidisciplinary experts able to:

- Understand the market demand;
- Find corresponding ideas circulating in the science society;
- Advise on the preparation of a business plan and raising finance;
- Activate networks.

Enterprise networks as a stimulus for innovation:

Paolo Annunziato presented the results of a recent study on Italian competitiveness prepared by Confindustria Centro Studi. Technological complexity is increasing in all sectors and SMEs are reacting to this change – their demand for innovation support services grew 10 times during the past 3 years. The survey suggests that enterprise networks are a stimulus for innovation, the weakest companies in terms of innovation are those which are isolated –they often do not feel the need to upgrade their technology and invest in product / process innovation. Hence the need for public central and regional authorities to support enterprise networks.
Friuli Venezia Giulia regional SME cluster legislation:

The industrial district system is considered by the regional administration as the source of economic and employment development. All joint actions addressed to the industrial clusters intend to strengthen the productive system competitiveness, highlight the most adequate policy measures, search for new support interventions, implement trans-regional projects. The regional cluster policy is based on the ‘Development Plan for Industrial Districts’ (ref.: Regional Law no. 27/1999), the legislative tool which determines:

- the operative strategic lines of the districts;
- the priority choices in terms of private investments and district development;
- the policy and priorities of structure and infrastructure investments;
- the private funding opportunities for specific projects.

Example of Montebelluna industrial district:

The success story of Montebelluna industrial district, manufacturing a surprising 80% of total world production in ski boots, inline skates, hiking boots, goes back to mid 1970, when leather – a traditional material for sports footwear – was replaced by cheaper plastic materials. This innovation was rapidly adopted by Montebelluna artisan footwear producers (traditionally located there since 18th century) and the district witnessed a real footwear boom. Nowadays the key to the sustainable growth of Montebelluna industrial district is:

- Continues diversification;
- Labour organisation (family run businesses, introduction of new managerial culture);
- Innovation in materials and design;
- The set of an international observatory with an objective to analyse and forecast market trends.

No company on its own would have the resources to achieve this.

New Zealand’s efforts to encourage innovation:

Commercialisation of ideas: More of New Zealand’s R&D needs to lead to economic benefit through commercialisation of the ideas generated. To achieve this the Government is:

- Creating new Venture Investment Funds;
- Funding Centres of Excellence;
- Improving R&D provisions;
- Developing better linkages between tertiary education providers, industry and communities;
- Assisting in developing mentoring frameworks;
- Supporting the partnership development of incubator processes.

Developing skills by:

- Building a quality education system;
- Investing heavily in industry training and cutting the costs to students of tertiary education;
- Implementing a digital opportunities strategy, including education based ICT pilot projects and a broadband access pilot;
- Strengthening pathways for students, from school to tertiary education, from school to the workforce, and from the workforce back into the education system.
2) Workshop Clusters and SME Internationalisation

Moderator: Pietro Marcolini, University of Urbino, expert on Industrial Districts, Marche Region, Italy  
Chairperson: Alessandro Colautti, Spokesperson, Autonomous Region Friuli Venezia Giulia, Italy 

- Roberta Rabellotti, University of Piemont, Italy 
- Claas van der Linde, Institute for Strategy and Competitiveness, Harvard Business School, USA, and University of St. Gallen, Switzerland 
- Alessandro Colautti, Executive Director, FINEST, Italy 
- Jean-Marie Rouillier, French Club of Industrial Districts, France 
- Ugo Poli, Informest, Italy 
- Vittorio Torrembini, Vice President, GMI, Group of Italian Industrialists in Moscow, Russia 

Closing Remarks: Alberto Giordanetti, Vice President, Institute for Industrial Promotion (IPI), Italy 

Rapporteur: Johanna Moehring, LEED Programme 

What is SME Cluster Internationalisation? 

A minimal definition advanced by the LEED Programme and by Dr van der Linde to frame the discussion: 

Clusters are horizontally and/or vertically linked firms operating in the same line of business that concentrate geographically. Certain firms of a cluster can have international links. 

What drives cluster internationalisation? 

Cluster and SME internationalisation can be: 

- Production Driven 
- Investment Driven 
- Innovation Driven 

It is important, however, to base internationalisation on clearly identified local competitive advantage. 

What path for Internationalisation? 

According to Dr Roberta Rabellotti, two roads to internationalisation exist, the low road and the high road. 

The Low road: Race to the bottom, putting pressure on the labour force by moving to countries with low labour costs. 

The High Road: Improvement of position in the global economy by enhancing the competitiveness of cluster firms by investing in: 

- Process Upgrading 
- Product Upgrading 
- Functional Upgrading 
- Intersectoral Upgrading
Clusters play an important role in the process of upgrading through the constant pressure to innovate and by learning from peers.

**What support is available to help SME and Cluster Internationalisation?**

**National:** Several examples of cluster support exist at national level. Just to cite two:
- **France:** The Club of Local Productive Systems (SPL) offers training for cluster managers and entrepreneurs and organises exchanges with firms abroad to foster international co-operation.
- **Italy:** Offers an abundance of structures and organisations to help SMEs in their effort to go international. Informest and Finest, among others, offer financial support and knowledge of business opportunities and are present in target countries to assist Italian entrepreneurs.

**International:** The European Union makes structural funds available to foster cross-border co-operation and SME support. The OECD LEED Programme, together with the Central European Initiative and the European Bank for Reconstruction and Development offer an enabling environment for networking and discussion at seminars and conferences.

**Advice from Panellists:**

- Help firms to delocalize, but also assist the remaining firms in their survival. Delocalise, but don’t deindustrialise!
- Invest in helping firms in transition economies to upgrade their skills by creating the right framework conditions and investment in human capital
- A message to the public sector: Let entrepreneurs take the driving seat and be flexible in your support! No cluster can be cloned!
- Public policy responses: Create the right infrastructure to foster internationalisation.
- Go around the world and learn: Learn about worst, not only best practice and identify innovative ideas

**3) Workshop Social Capital and Clusters**

Moderator: Mikel Landabaso, DG Regional Policy, European Commission

- Stuart Rosenfeld, Regional Technology Strategies, Inc., United States
- Michael Woolcock, World Bank
- Jaime de Castillo Hermosa, INFYDE, Spain
- Gian Maria Fara, President, Eurispes, Italy
- Andrea Balestri, Italian Club of Industrial Districts, Tuscany, Italy

Closing Remarks: Paul Cullen, former President of the LEED Directing Committee, Counsellor at the Permanent Representation of Ireland to the European Union, Belgium

**Rapporteur: Dina Ionescu, LEED Programme**
A first lesson on the importance of social capital could be derived from the way social capital panellists prepared for the conference: Participants immediately responded, exchanged emails and background material and started the discussion well in advance of the workshop. Mr Balestri commented that speakers might have seen the need to live up to the reputation of the topic. It also showed that social capital, whatever form it takes is a powerful force shaping our lives.

The whole conference was in fact a social capital event, building networks among conference participants.

Preliminary remarks: A point that reappeared during the sessions was the question of language: Mr Woolcock talked about the language of social capital, Mr Rosenfeld mentioned how words help to build networks, co-operation and clusters, and with that, social capital in itself. Mr del Castillo talked about social capital, which according to him is at the same time a fashionable expression and a reality.

I. Introduction

1) Defining types of social capital (Woolcock)

- Bonding (with persons like you)
- Bridging (with people different from you)
- Linking (capacity to engage in social process)

The World Bank sees social relations as part of the solution, and not of the problem in the context of poverty reduction

2) Big issues

What type of social capital is useful to local development? (de Castillo)

Is social capital intrinsic to clusters? Participants agreed that social capital does not equal clusters, that clusters are more a phenomenon of economies of scale and scope and that social capital exists as a cluster externality, not as an essential ingredient. Social capital is very much based on culture – one cannot introduce culture of co-operation where it doesn’t exist already.

Mr Balestri shattered the myth of Italian districts where, according to him, competition, not co-operation is the driving factor. Mr Fara provided a very interesting distinction between Social Districts and Industrial Districts. Participants held the very pessimistic view that sometimes, social capital does hinder the dynamic development of industrial districts, accentuating the decline and deciding over inclusion and exclusion of participants. On the positive side, the topic of social capital and industrial districts is taken up in less favoured regions of the globe where social connections exist, but where the lack of amenities stands in the way of successful cluster development. Adversity seems to spur social capital – people realise that the main competition is elsewhere and that co-operation pays off.

Co-operation as a concept needs to be studied more. It could be used in the internationalisation of SMEs in the context of FDI, partnerships and corporate social responsibility. Interdisciplinary co-operation is important in this respect.

II. Policy Questions

1) What can a policymaker do concretely with regard to social capital and clusters?
2) What can we learn from cluster failures?
3) Can we find market failures that are due to lack of social capital?
All speakers had a range of proposals as to what to do – According to them, policies have to take into account the following issues/questions:

If social capital is a priority of cluster policies, should it be a means or an end?
What can public policy do differently?
How can one differentiate policies for emerging or existing clusters?
If clusters suffer an external shock (Jaime de Castillo), should that be a case for public intervention?
How can private sector and public policy initiatives be co-ordinated in cluster development?

Key finding: There is no one policy – Policies need to be adapted to the local level

III. Actions

• Measure Social Capital
• Foster a positive environment by investing in infrastructure, amenities, quality of life, well-being
• Evaluate costs and benefits
• Set clear rules

IV. Key Findings of the Workshop

• Work with networks
• Foster interactions among entrepreneurs and the public sector, as well as among entrepreneurs themselves (Woolcock)
• Invest in education and training (Rosenfeld)
• Trust is a learning process (Balestri)
• Intermediaries are central to compensate for market failures with regard to social capital -> Know Who! (Woolcock)
• Territorial base of entrepreneurship (Fara)
• Intervene in market failures of social capital: Lack of networks, lack of information, lack of links among
• SMEs and among communities: Don’t necessarily invest more money, but help to build connections.