



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

PNRR_351_DOTT_RICERCA Research Field: PUBLIC POLICIES & DIGITAL TOOLS FOR SUSTAINABLE & RESILIENT SUPPLY CHAINS

Monthly net income of PhDscholarship (max 36 months)
€ 1450.0
In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity	
Motivation and objectives of the research in this field	<p>The Public Administration includes among its goals the support and improvement of the competitiveness of the country, defining appropriate policies to support companies to face the current and future issues, but also to guarantee equity and sustainability in a multistakeholder perspective. Companies today operate within global and complex Supply Chains, and are exposed to major challenges such as climate change, geopolitical tensions and health issues. Italian companies are embedded in the international context and supporting their competitiveness means protecting employment and welfare for the entire society. International supply chains today play a fundamental role in terms of Risk Management and Sustainable Development: they may be a source of major problems and negative impacts, on both the society and the environment, or they may become a key contributor to sustainability. At the same time, the Digital Transformation is radically impacting supply chains: technologies such as the Internet of Things, Blockchain, 3D Printing, Big Data Analytics and Artificial Intelligence are becoming pervasive and can revolutionize the way supply chains are designed and managed, impacting the fundamental performance of delivery, quality, flexibility and cost, as well as environmental and social sustainability. In recent years, supply chains have been affected by several disruptions of various kind, including geopolitical conflicts, health issues, natural events, etc. and therefore Risk Management has become</p>



	<p>imperative. This requires to improve the ability for public actors and companies to identify and assess the various risk sources and to find new ways to reduce the exposure, as well as to increase the resilience to disruptions. Supply Chain Management Research today needs to address the challenges raised by Risk Management, Sustainability, Digital Transformation and Supply Chain Resilience, combining multidisciplinary approaches to find innovative answers to the radical problems that the world is facing today.</p> <p>The Public Administration needs new methods and tools, based on advanced digital technologies, to monitor and assess the risk exposure and the sustainability performance of companies and supply chains, in order to develop and provide adequate support. Public Policies may significantly help companies in facing the current challenges, such as:</p> <ul style="list-style-type: none"> - identifying the various risk factors, assessing the risk exposure of Italian companies and promoting the appropriate mitigation actions - facilitating the reshoring of critical activities previously located abroad and attracting foreign investments; - enabling the adoption of supply chain finance solutions that help SMEs to face the liquidity constraints and improve their sustainability performance; - defining and disseminating standards and platforms that facilitate transparency and traceability of products along the supply chain.
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>The research project will be developed according to the operations and supply chain management perspective, relying on empirical research methodologies such as Case Study, Survey, and Action Research.</p> <p>The research will be conducted in collaboration with relevant public and private institutions, in particular with the Supply Chain Finance Community (www.scfcommunity.org). The Supply Chain Finance (SCF) Community is an independent global community consisting of knowledge institutions, corporations, and supply chain finance professionals who share best practice and new research in an open, collaborative environment.</p>



	The candidate will spend a research period abroad with a partner academic institution member of the Community. The candidate will also be exposed to international academic networks (EurOMA, IPSERA).
Educational objectives	The PhD candidate will develop competences and attitudes aimed at developing and implementing innovative solutions in the field of supply chain management: <ul style="list-style-type: none"> - New methods and practices for Supply Chain Risk and Resilience management; - Innovative methods practices to assess and improve Supply Chain Sustainability - New applications of digital technologies to improve Supply Chain Sustainability and Resilience - Innovative Supply Chain Finance Solutions
Job opportunities	<ul style="list-style-type: none"> - Supply Chain Sustainability Manager - Supply Chain Risk Manager - Supply Chain Digital Transformation Manager - Supply Chain Finance Manager
Composition of the research group	2 Full Professors 1 Associated Professors 1 Assistant Professors 3 PhD Students
Name of the research directors	Caniato F., Ronchi S., Moretto A.

Contacts	
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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	725.0 €
By number of months	6



National Operational Program for Research and Innovation	
Company where the candidate will attend the stage (name and brief description)	
By number of months at the company	0
Institution or company where the candidate will spend the period abroad (name and brief description)	Supply Chain Finance Community (www.scfcommunity.org). The Supply Chain Finance (SCF) Community is an independent global community consisting of knowledge institutions, corporations, and supply chain finance professionals who share best practice and new research in an open, collaborative environment. The PhD candidate will spend a 6-month research period with one of the international partner of the Community to extend the scope and reach of the activity, from a multistakeholder perspective.
By number of months abroad	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p><i>Funding for educational activities: 4.900,00 Euros for three years.</i></p> <p><i>Teaching assistantship: There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.</i></p> <p><i>Desk availability: shared use Computer availability: individual use</i></p>