## Innovation in the documentation and representation of goods in the agri-food chain Giovanna Ginex

The idea is to study the topic of bills of lading in the current context of digitization. In particular, the research will provide the basis for a more in-depth examination of the subject of securities representing goods, as essential securities for transferring possession of goods in international trade. The perspective is in the sense of innovation of both the document and the mode of circulation. As already predicted in the doctrine, the path ahead is neither short nor downhill: it passes through overcoming the limits of form and circulation currently typified by the legislature. It seems that the relationship between exception and norm with the dematerialized circulation of trade documents deserves to be revisited, in light of the model law recently issued by UNCITRAL (*Model Law on Electronic Transferable Records*), in order to judge whether or not the novelty of the electronic records affects the paper-based discipline.

The research is based on the issues linked to the freight movement in the agri-food market at national, European, international level, and it is intended to reconstruct the relevant documentation and representation.

The goal is to study the technological and digital innovation impact in the field and to verify its main outcomes on the regional economy.

The reflection intends to bring back to the system the multiplicity of institutions currently regulated by adapting them to the reality of the agri-food chain in which detect the peculiarities of goods (which have always been the subject of specific attention at the regulatory level due to reason of the tendency of perishability) and the close interconnection between producers and providers of services functional to the processing and circulation of commodities.

At this stage, it is of paramount importance the documentation intended to enable the passage of goods between operators in the supply chain by ensuring the necessary information. This need, which is combined with that of speed in the transfer of goods, linked to the characteristics previously identified, does not often find adequate fulfillment in the paper document, which is subject to a system of issuance and circulation that is not easy.

Beginning in the second half of the last century, under the push of technological innovation, a process of innovation began to take hold that, starting with equity securities, gradually affected also those representatives of commodities. The most immediate result was the dematerialization of the paper security and its replacement by book entries. This "transformation" marked the transition from the "individuality" of representative documents, evidently now lacking appeal in terms of the certainty and speed demanded by modern market practices, to forms of documentation and representation of rights intended to circulate with the intermediation of organized and computerized.

However, experience to date has shown that digitization, on the one hand, fails to completely eliminate its problems; on the other hand, it cannot disregard from computerization and its effects on the representative and evidentiary functions of the document (think to the problems of protecting access credentials, authenticity of digital signatures, protection of privacy and suppression of computer crimes). The examination of the multiple institutions cannot ignore the impact resulting from digitization and certainly cannot fail to relate to the system of international rules and practices (in particular, those collected by the ICC or the UNCITRAL).

In this context, the digital representation of deposit and transport cause problems (similar to those studied for companies or for mass documents) of coordination with the paper-based discipline and open to prospects for revolutionary interpretation of the fundamental aspects of commodity ownership and "centralized" management of depository and transportation security internationally (see the "Bolero" or *Bill Of Lading Electronic Registry Organization* system, as an evolution of the registry approach).

From this point of view, the investigation also has strong connections with the risks of circulation related to food safety when precautionary measures dictate the tracking of goods.

Therefore, the objective of the research is multifaceted: a) to identify new tools representative of goods in digital and dematerialized format or verify the adaptability of traditional goods representative

instruments to new technologies and the current needs of markets of traditional and also digital goods; b) to verify the feasibility of a blockchain serving the agribusiness distribution chain, studying the legal issues related to smart contracts and attempting.