

Title: **What Is Behind Fleet Evolution: Application of A Flow Analysis to the French Fisheries**

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Abstract: If the study of the fisheries dynamics increasingly seeks to take into account the evolution of fishing fleets, the main mechanisms which govern their evolution at the local, national or international levels, are often not studied at all, or only partially studied. This applies in particular to vessel entry and exit or fleet transfers between fisheries and/or regions through second-hand vessel markets. These vessels movements also linked to owners flows, with owners of the invested capital deciding to stay or to leave a particular fishery or region. The aim of this paper is to identify what the key processes in the evolution of a fleet are by characterizing both the movements (flows) of vessels and owners. A typology of the flows of both vessels and owners is drawn based on entry, exit and vessel trade on the second-hand market. The approach is applied to the case of the French fishing fleet. The following flow analysis identifies structural elements of the fleet dynamics and for various scales of analysis. The approach also attempts to link the evolution of fleet structure to fisheries management, particularly in relation to the provision of economic incentives (subsidies to vessels building, scrapping) and fishing rights allocation mechanisms. Finally, the prospects for applying this approach across Europe are discussed.