The Gamma function studied by Bernoulli appear all over mathematics and in particular whenever we study special contour integrals. We will review a class of special functions called Barnes multiple Gamma functions that generalize the Gamma function and we will see how they appear in the study of a class of stability conditions with a very simple Donaldson-Thomas theory. This goes through solving a Riemann-Hilbert-Birkhoff (RHB) boundary value problem induced by the wall-crossing formula for DT counting invariants. Based on a joint work with T.Bridgeland and J.Stoppa.