

**PhD THESIS**

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**Thesis Title:**

**Equilibrium interest rates  
and the anchoring of inflation expectations**

**Keywords:**

real rates; uncertainty; habits; yield curve inversion; consumption volatility;  
inflation expectations; inflation anchoring; tail correlation; inflation pass-through

PhD in Economics

XXIX Cycle

LUISS Guido Carli

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December 2016

Thesis Defense:

Month Day, Year

Thesis Committee:

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## **Abstract**

In Chapter 1, based on a paper coauthored by Adriana Grasso (LUISS University), I propose a consumption-based model that allows for an inverted term structure of real and nominal risk-free rates. In equilibrium, real interest rates depend not only on shocks to consumption growth but also on expectations about future consumption growth volatility. In bad states, a high uncertainty makes agents more willing to accumulate precautionary savings and to rebalance their bond portfolios towards longer maturities, pushing the equilibrium short-term yields above long-term ones. Pricing time-varying volatility risk is essential to obtain the inversion of the real curve and allows to price the average level and slope of the nominal one.

In Chapter 2, based on a paper coauthored by Laura Sigalotti (Bank of Italy), I propose a new indicator of the anchoring of inflation expectations based on a logistic model. By inspecting the comovement of daily changes in short and long-term inflation swap rates, it measures the odds that strong variations in short-term inflation compensation are channelled to large movements of the same sign in long-term one. The indicator is able to capture the transition from anchored to unanchored expectations, implying a non-linear pass-through of shocks to long-term expectations. Since 2014, the asymmetric pass-through from short- to long-term inflation compensation suggests that the degree of anchoring of euro area inflation expectations have diverged from the US's and UK's one.