



**SÉMINAIRE**

# OPTIMAL CENTRAL BANK BALANCE SHEETS WITH INCOMPLETE MARKETS - ZACH BETHUNE

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**Abstract:**

*I study the optimal size of a central bank's balance sheet in a continuous-time, incomplete-markets economy where households self-insure against idiosyncratic income and expenditure risk by accumulating two nominal assets: liquid money and illiquid bonds. The central bank*



*conducts open market operations—swapping money for bonds— and policy determines both the inflation rate and the relative supply of liquid and illiquid assets available to the public. As a benchmark, I first characterize optimal policy when monetary and fiscal instruments are jointly controlled, and then study the central bank's problem when it is separated from fiscal policy. When monetary and fiscal policy are jointly chosen, money and bonds operate as two separate instruments that target two distinct redistributive motives: the inflation tax shifts resources from wealth-rich to wealth-poor households, while the liquidity premium shifts resources from bond-rich to money-holding households. Under separation, the central bank has only one tool—the relative size of money and bonds on its balance sheet—and its optimal level reflects the relative strength of these two motives, growing larger when the gap between wealthy and liquidity-constrained households widens.*