



Fixed Income (FN351)



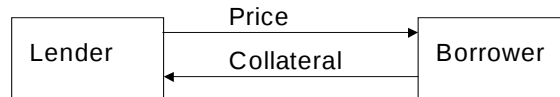
Repurchase agreements

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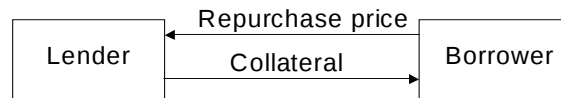
How to borrow?

- Margin account
- Repurchase agreement (Repo)

Today



Repurchase date



- From borrower's side: Repo; From lender's side: Reverse repo

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How to borrow?

- Risk to lender using Repo
 - Collateral changes in price
 - Lend principal at or lower than the price of collateral
 - Repurchase price = margin+price of collateral
 - Credit risk of lender is less important than lending without collateral

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Example

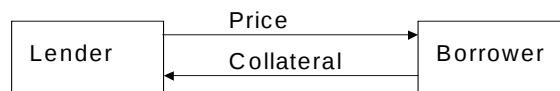
- GS enters into a repurchase agreement with Bank of America to borrow using as collateral a government coupon bond which is currently priced at 102.00 (\$100) face value. It wants to enter into a 1-week repo for 10M. Bank of America requires 5% margin. Interest rate in the repo market is 2% annually.
- GS is said to enter into a repo agreement and Bank of America enters into a reverse repo

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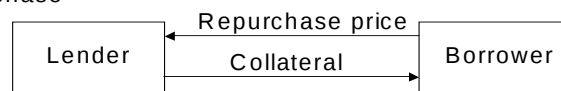
How to borrow?

- Repurchase agreement (Repo)

Today



Repurchase date

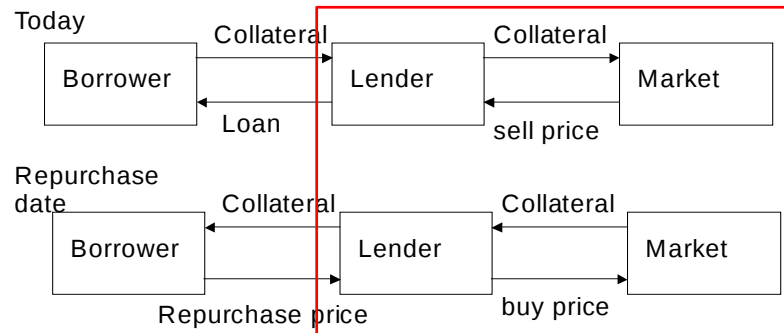


- Interest rate at 2% annual or 0.038% per week $[(1.02^{1/52}) - 1]$
- Collateral value = $100M \times 1.05 = 105M$
- Number of bonds as collateral = $105/102 = 1.0294 \times 1M/100 = 10294$ bonds
- Price = $1M (1 - 0.0038) = 0.9962M$, Repurchase price = $1M$

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Short selling using the Repo market

- Repurchase agreement (Repo)



- The Repo market is usually for short-term lending and borrowing