



# Demand for funds decrease

Federal Funds Rate

ffr

$S_0$  (from banks  
with excess  
reserves)

A leftward shift in  
the Demand of  
funds

$ffr_e = 3\%$

$ffr_1 = 2\%$

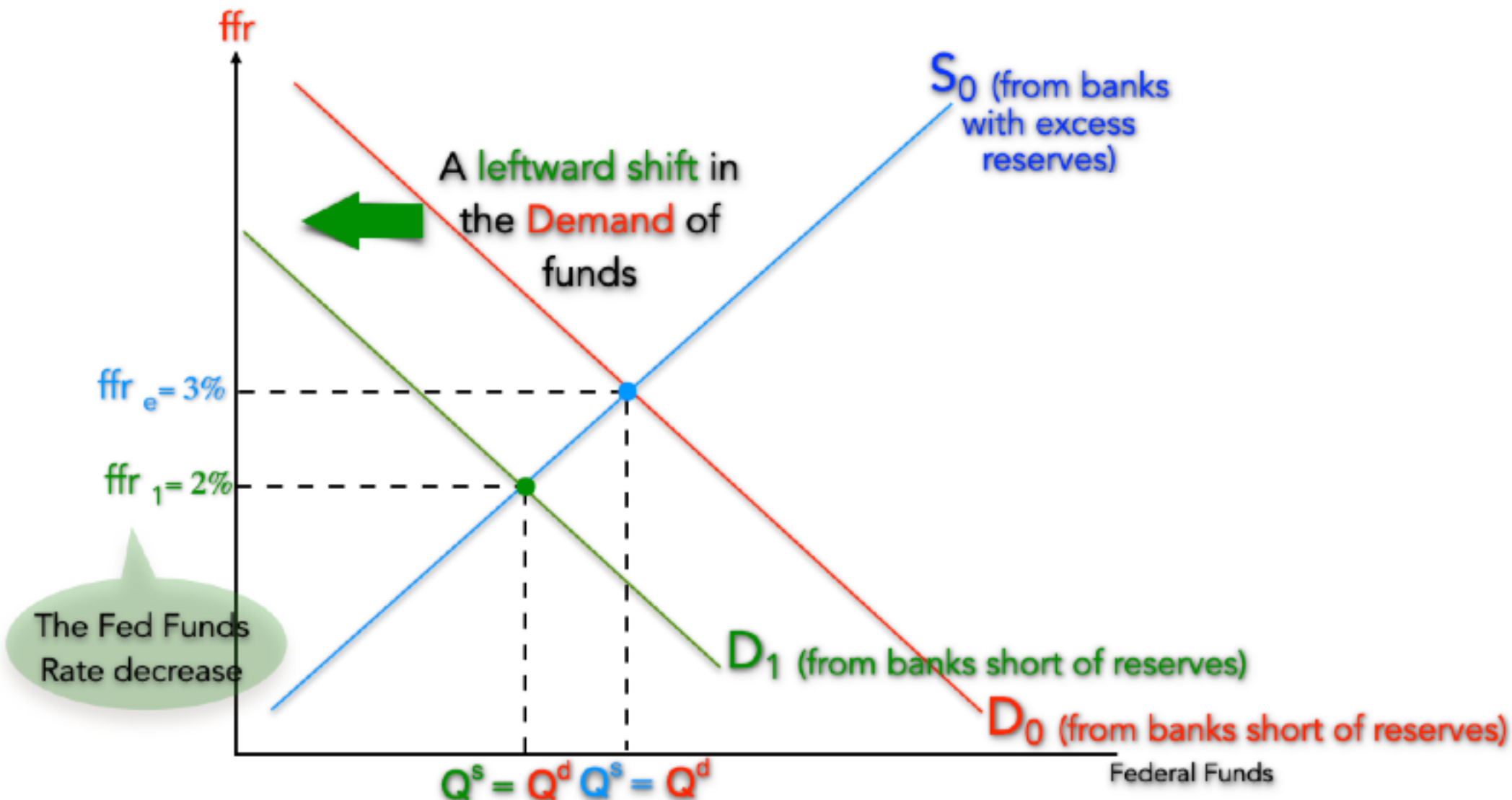
The Fed Funds  
Rate decrease

$D_1$  (from banks short of reserves)

$D_0$  (from banks short of reserves)

$Q^s = Q^d$   $Q^s = Q^d$

Federal Funds



# Demand for funds increase

Federal Funds Rate

ffr

The Fed Funds  
Rate increase

$\text{ffr}_1 = 4\%$

$\text{ffr}_e = 3\%$

$S_0$  (from banks  
with excess  
reserves)

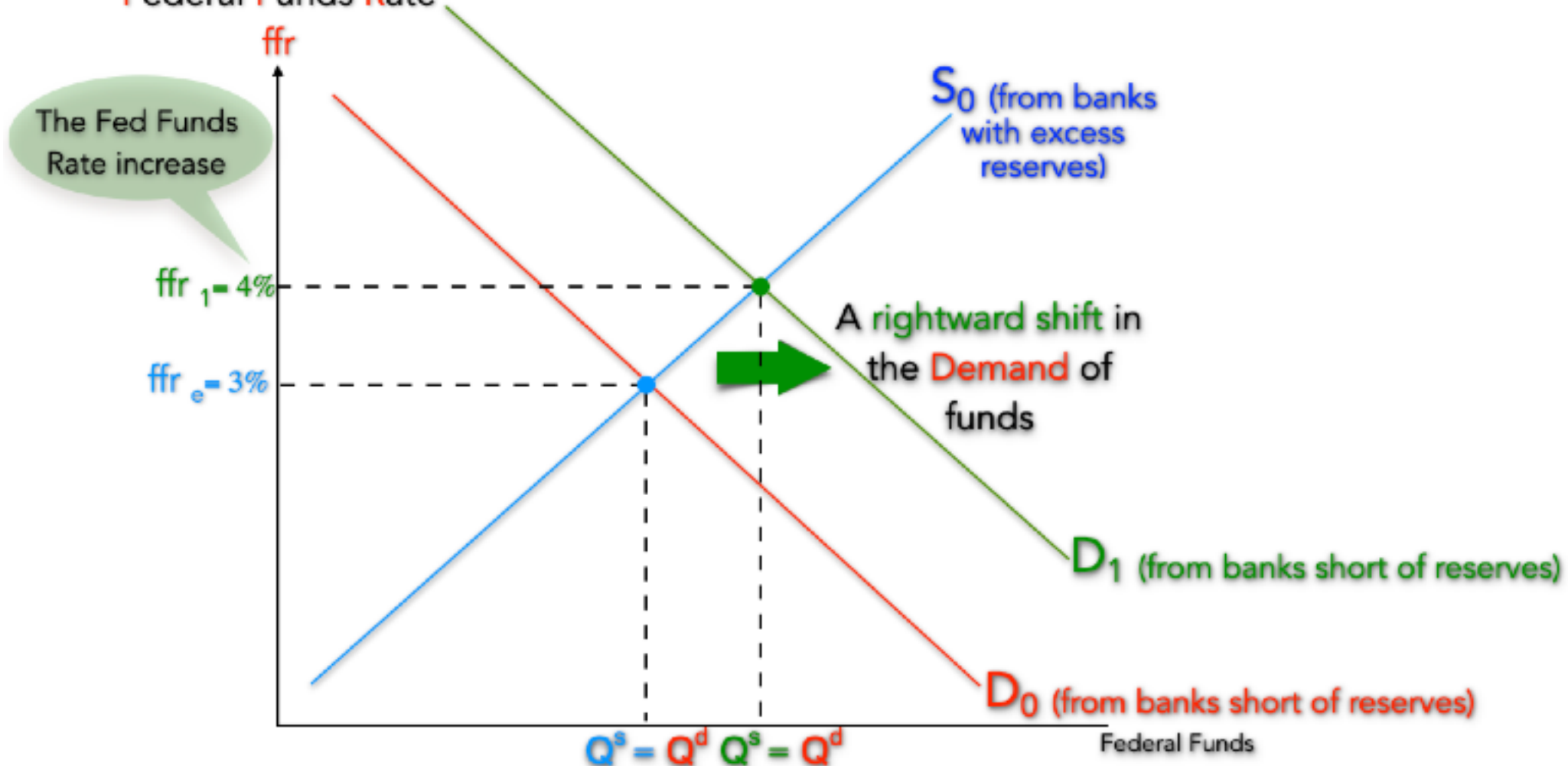
A rightward shift in  
the Demand of  
funds

$D_1$  (from banks short of reserves)

$D_0$  (from banks short of reserves)

$Q^s = Q^d$   $Q^s = Q^d$

Federal Funds

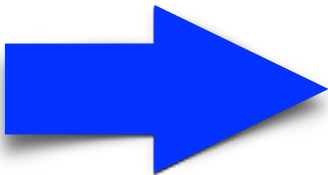




# Monetary Policy Tools

# 3. Required Reserves Ratio

When the Fed Increase the  
Required Reserves Ratio,  
more banks become Short of  
Reserves

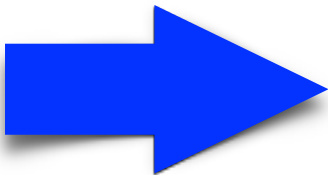




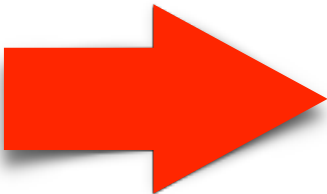
Increase in the  
Demand for  
Federal Funds

The Federal Funds

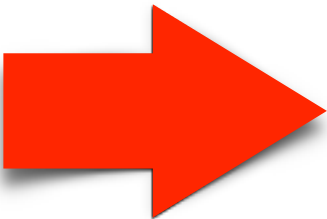
Rate decrease



When the Fed Decrease  
the Required Reserves  
Ratio, fewer banks will be  
short of reserves



Decrease in the  
Demand of Federal  
Funds



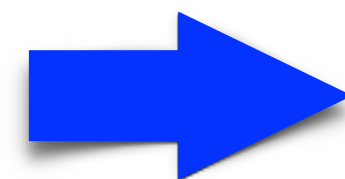
The Federal Funds  
Rate increase



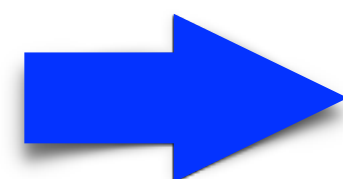
# Monetary Policy Tools

## 3. Required Reserves Ratio

When the Fed Increase the Required Reserves Ratio, more banks become Short of Reserves

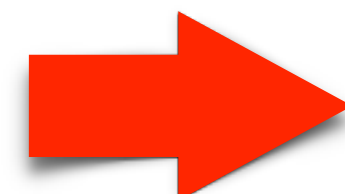


Increase in the Demand for Federal Funds

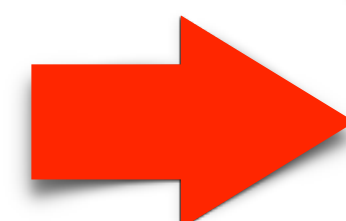


The Federal Funds Rate increase

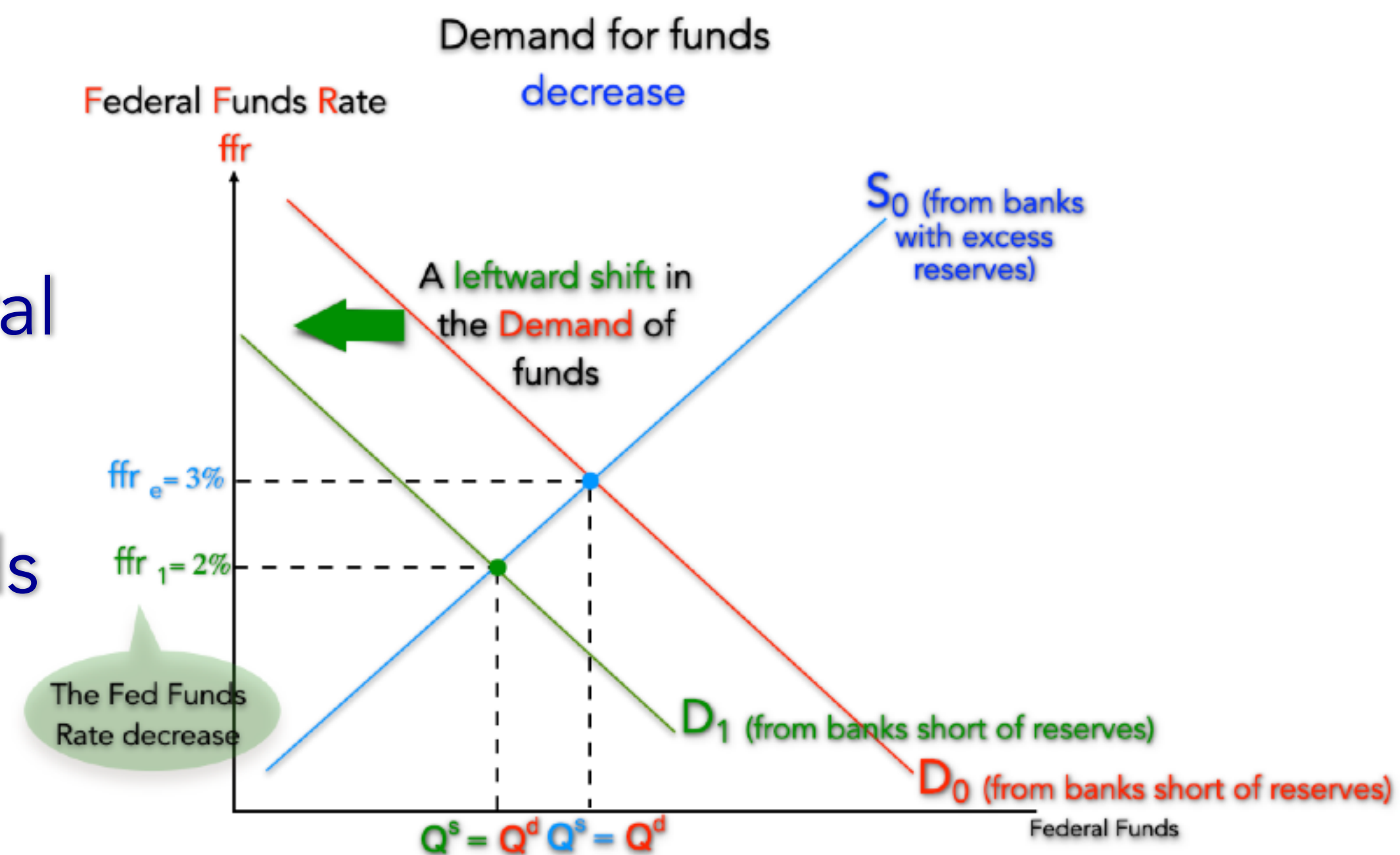
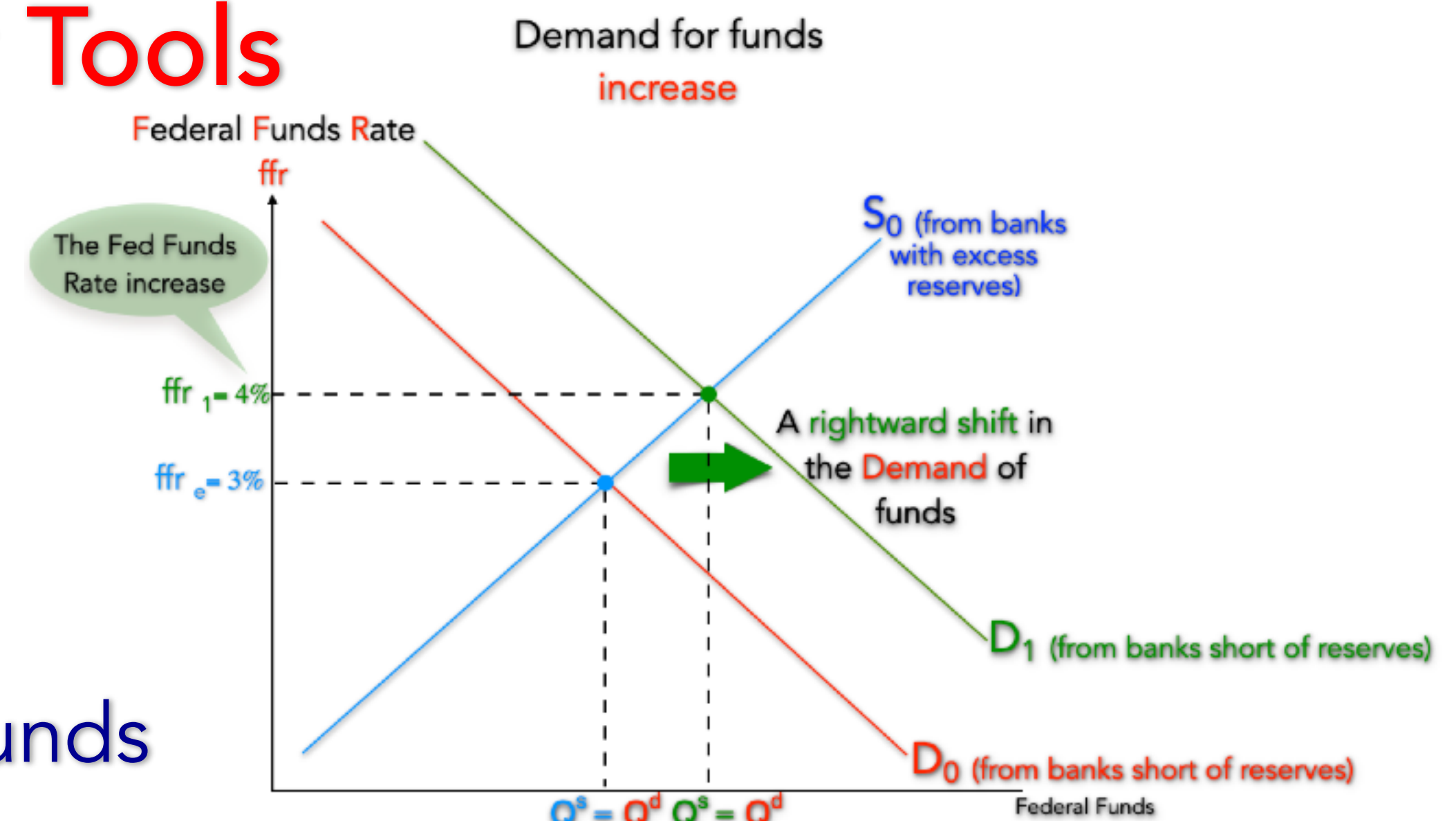
When the Fed Decrease the Required Reserves Ratio, fewer banks will be short of reserves



Decrease in the Demand of Federal Funds



The Federal Funds Rate decrease



# The Yield Curve Plots yield on Government Bills, Notes and Bonds