EMBARGOED UNTIL THURSDAY, OCTOBER 8, 2020 AT 12:10 PM U.S. EASTERN TIME & 11:10 AM U.S. CENTRAL TIME – OR UPON DELIVERY

Federal Reserve Bank of Boston®

Economic Fragility: Implications for Recovery from the Pandemic

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Marburg Memorial Lecture
Marquette University Economics Department

October 8, 2020

Marburg Memorial Lecture – Focus on Social Dimensions of Economic Issues

- Economists discuss social dimensions all too rarely
- Worldwide pandemic is a stark reminder
  - More than 210,000 have died in the United States
  - Minorities disproportionately impacted
    - More likely to live in dense urban areas
    - Employed as front-line and essential workers – often at modest pay
- Uneven effects of recessions are not unique to the pandemic
  - Recessionary dynamics
    - Businesses close
    - Permanent loss of jobs
- However, policy can impact severity of recession

Recession Dynamics are Impacted by the Health of the Financial System

- Is the United States, as currently configured, particularly vulnerable to economic disruptions?
- Pandemics cannot be predicted precisely – but vulnerabilities to disruptions make the downturns, when they occur, more severe
- Concentration of risk in commercial real estate and levered firms is making the effects of the downturn more severe
- Financial vulnerabilities impact more than shareholders
  - Bankruptcies result in permanent job losses and significant scarring of labor markets
  - Bankruptcies result in losses to creditors

Bankruptcies often Reflect Accumulation of Risks

- Ernest Hemingway – The Sun Also Rises

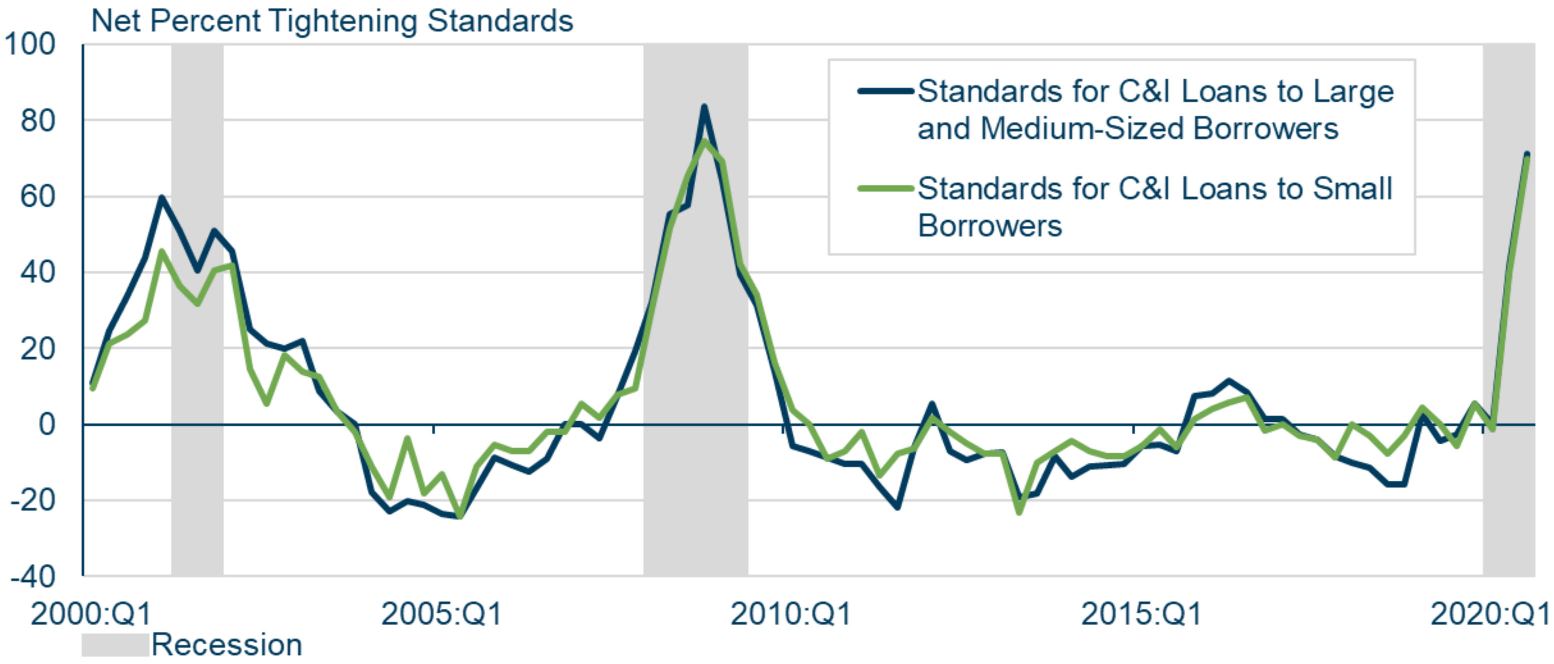
  "How did you go bankrupt? … Two ways, gradually and then suddenly."
- Unfortunately too many are facing the "suddenly" part now
- Increase in risk-taking – gradually accumulates in low-interest environment
  - Households and firms reach for yield
  - Take on more debt that can be difficult to pay in downturns
  - Leverage magnifies returns in good times; magnifies losses in bad
- Increases in risk-taking – one way that monetary policy works
  - In depths of recession – borrowers may be too risk-averse
  - But low rates persisting in recovery – can result in excessive risk-taking

Outline of My Remarks

- Tightening of credit terms and credit availability
- Impact magnified by low interest rate environment in preceding economic expansion
- Accumulated risk-taking in real estate and reliance on debt are making this downturn more severe
- Significant implications for labor market conditions
- Policy implications
  - Supervisory policies – to address build-up of risks
  - Financial stability needs more emphasis – to make downturns less severe

Figure 1: Bank Lending Standards for Commercial and Industrial Loans

2000:Q1 - 2020:Q3

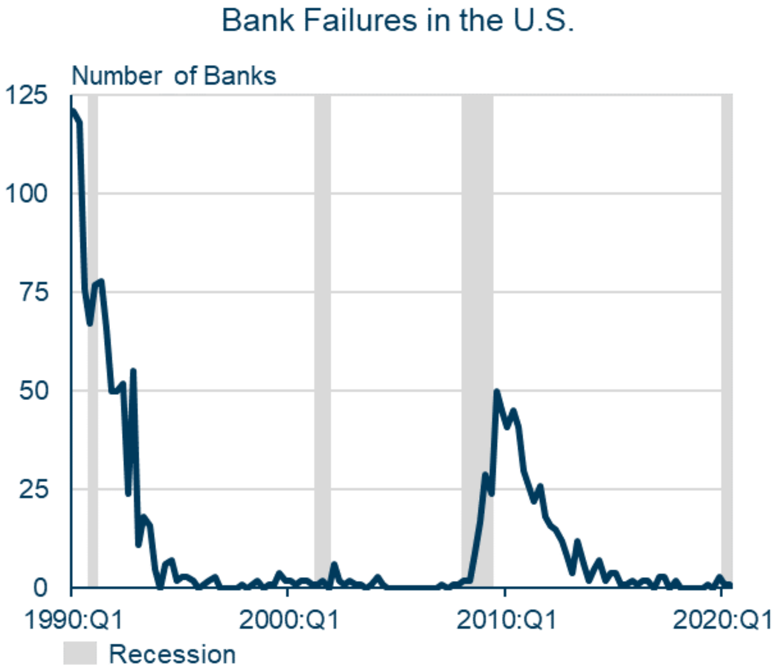


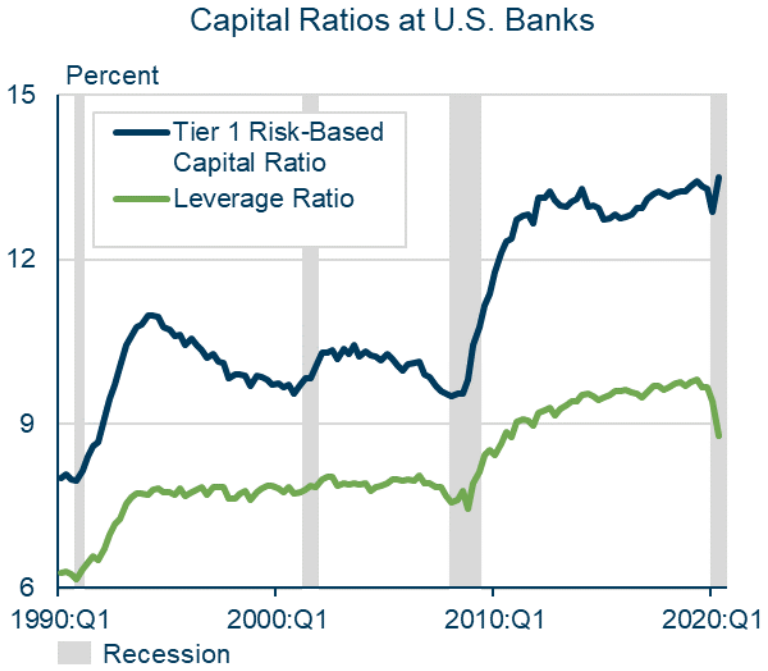
Note: Large and medium-sized borrowers have annual sales of over $50 million.

Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices, NBER, Haver Analytics

Figure 2: Bank Failures and Capital Ratios at U.S. Banks

1990:Q1 - 2020:Q2



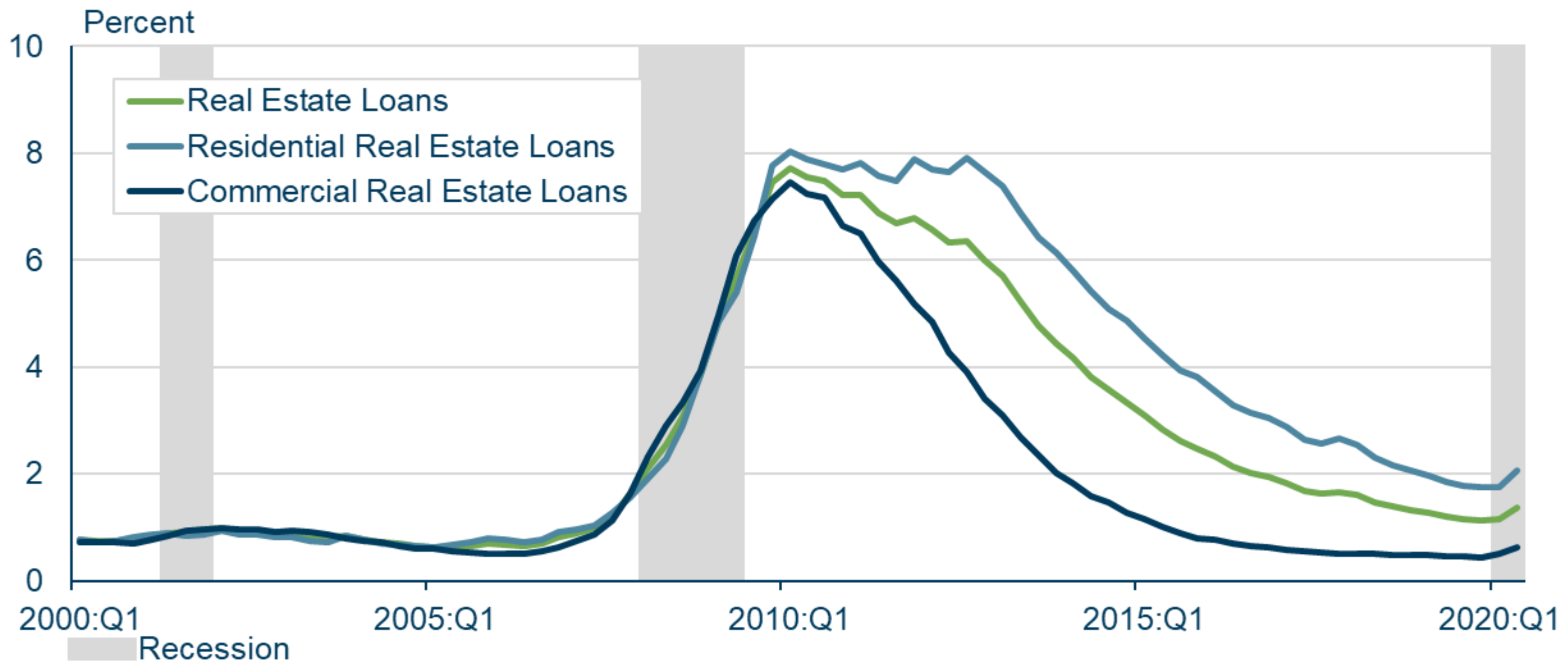


Note: For capital ratios, U.S. banks include commercial and savings banks throughout the period and the former OTS-regulated thrifts beginning in 2012. Bank failures include all U.S. bank failures throughout the period.

Source: Quarterly Bank Call Reports, FDIC, NBER, Haver Analytics

Figure 3: Nonperforming Real Estate Loans at U.S. Banks

2000:Q1 - 2020:Q2

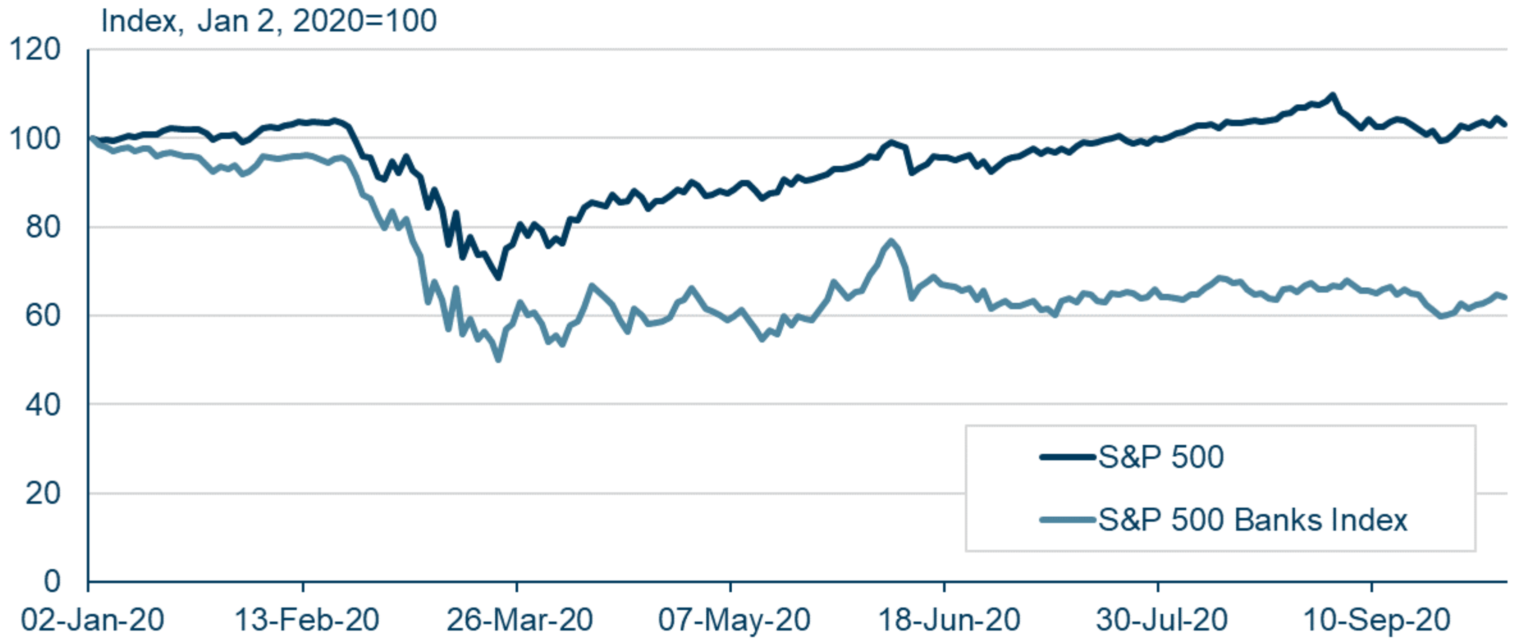


Note: Nonperforming loans are loans 90 or more days past due plus loans in nonaccrual status by loan type. Nonperforming loans are displayed as a share of all loans of that particular loan type. U.S. banks include commercial and savings banks throughout the period and the former OTS-regulated thrifts beginning in 2012.

Source: Quarterly Bank Call Reports, NBER, Haver Analytics

Figure 4: Performance of Bank Stocks and the S&P 500

January 2, 2020 - October 6, 2020



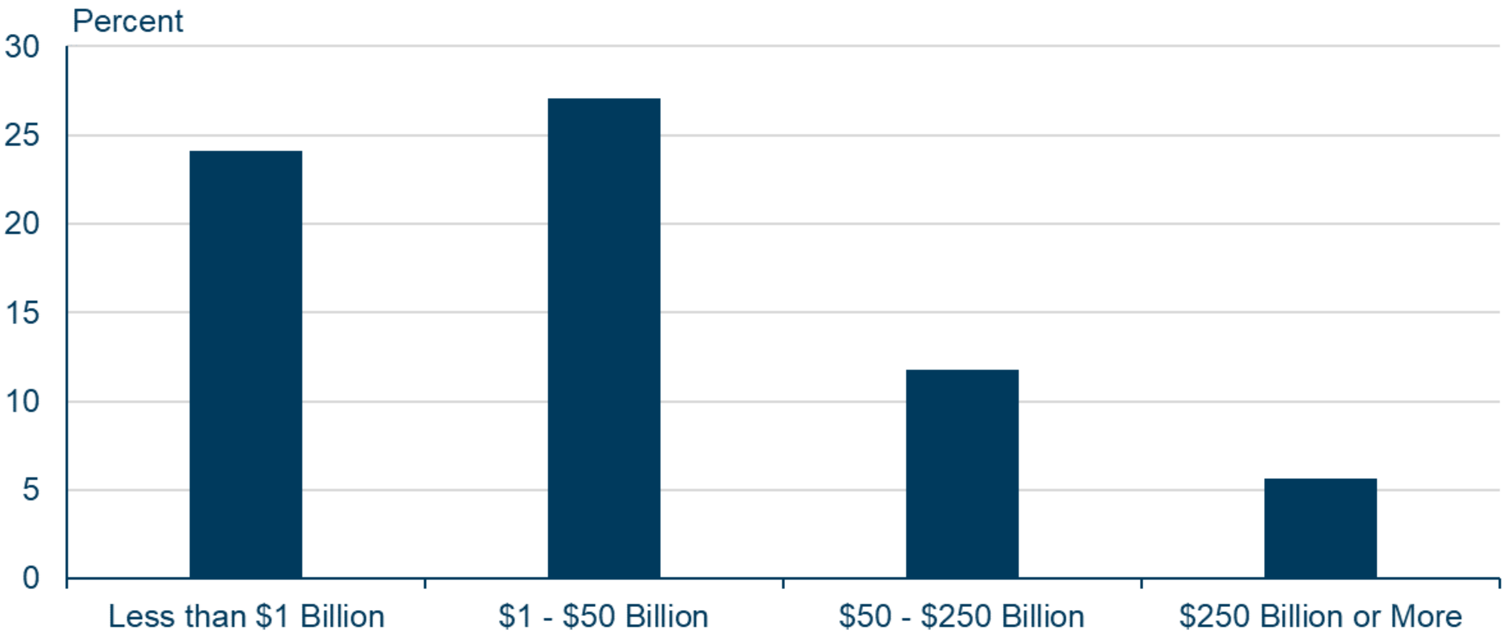
Source: Bloomberg Finance L.P., Haver Analytics

Credit Tightening Increases Recessionary Dynamics

- Credit tightening can occur even when banks are expected to remain solvent despite a depletion of capital
- Bank data responds with significant lags
- Forbearance for customers – while helpful – distorts data
- Declines in bank stocks, and bankruptcies, reflect significant economic uncertainty going forward

Figure 5: Commercial Real Estate Loans as a Share of Assets at U.S. Banks by Asset Size

as of June 30, 2020

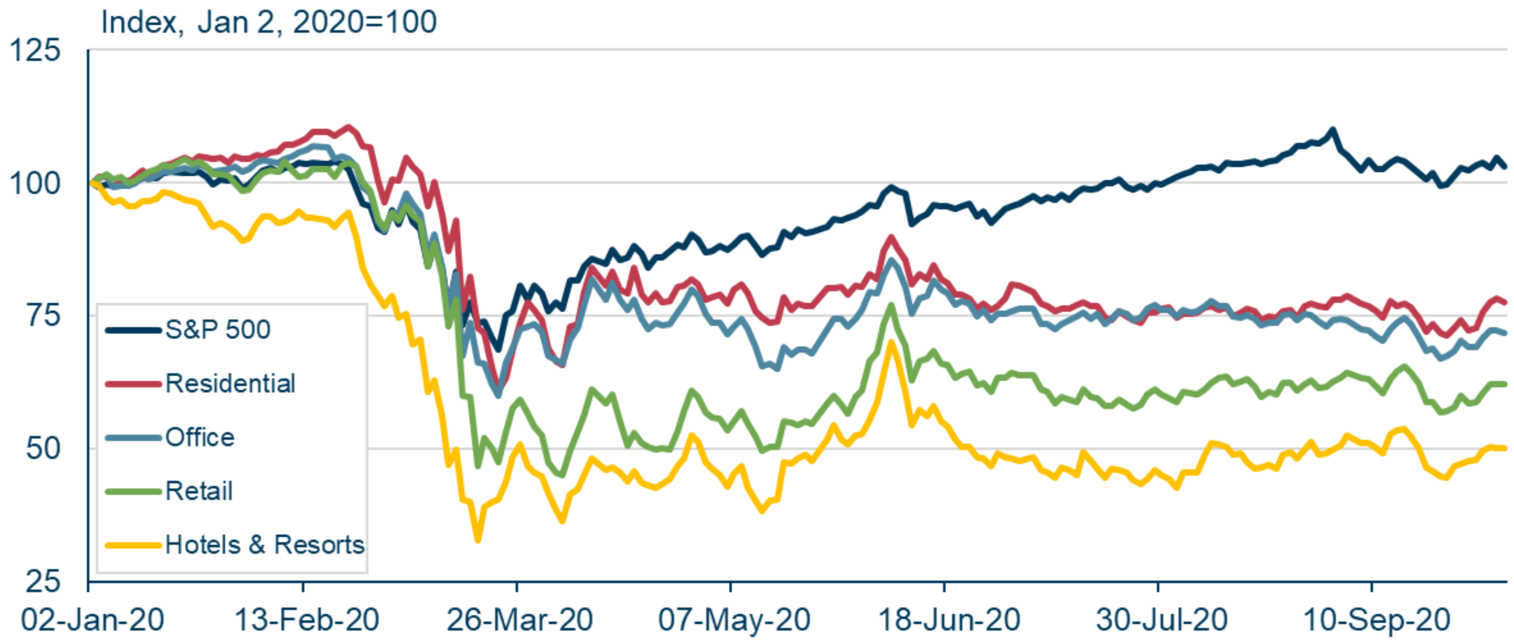


Note: U.S. banks include commercial and savings banks and the former OTS-regulated thrifts.

Source: Quarterly Bank Call Reports, Haver Analytics

Figure 6: Performance of REIT Equity Indices by Sector and the S&P 500

January 2, 2020 - October 6, 2020



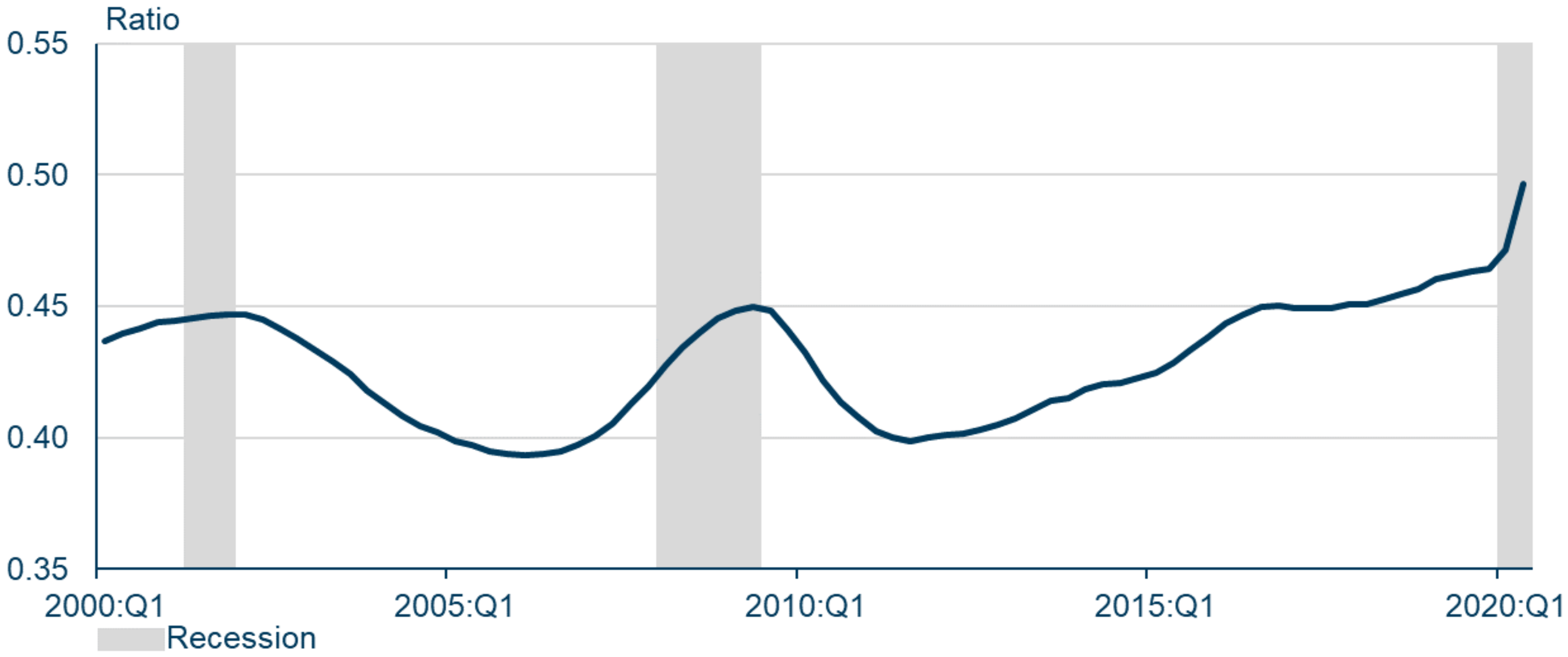
Source: Bloomberg Finance L.P., The S&P Supercomposite 1500 REIT Indices by Sector

Risk in Commercial Real Estate

- Real estate risks are important in recession dynamics
- Exposure is concentrated in smaller banks – still a financial stability concern
- Low bank and REIT prices reflect market concerns

Figure 7: Nonfinancial Corporate Business Debt Relative to GDP

2000:Q1 - 2020:Q2



Note: Series is the four-quarter moving average of the ratio of nonfinancial corporate business debt to GDP.

Source: Federal Reserve Board, NBER, Haver Analytics

Figure 8: Leverage Ratios of Retailers with a Default During 2020

Default Date	Firm Name	Debt/EBITDA
05/27/2020	Tuesday Morning Corporation	2.25
03/09/2020	Bluestem Brands, Inc.*	4.39
06/23/2020	GNC Holdings, Inc.	7.12
07/23/2020	Ascena Retail Group, Inc.	7.31
08/02/2020	Tailored Brands, Inc.	8.08
05/15/2020	J.C. Penney Company, Inc.	8.61
07/24/2020	Party City Holdco Inc.	10.14
05/07/2020	Neiman Marcus Group, Inc.*	12.02
08/12/2020	Stein Mart Inc.	19.59
05/04/2020	Chinos Holdings, Inc.*	33.72
02/17/2020	Pier 1 Imports, Inc.*	NA
07/13/2020	RTW Retailwinds, Inc.	NA
05/11/2020	Stage Stores Inc.*	NA

*Note: *Most recent FYE financial data available prior to FYE 2019.   EBITDA is earnings before interest, taxes, depreciation, and amortization. Total debt includes operating and capital leases. Default is defined as a missed or delayed disbursement of interest or principal payment, bankruptcy filing or receivership, or a distressed debt exchange. NA depicts firms with negative Debt/EBITDA. As the ratio is a measure of earnings capacity to pay debt, negative EBITDA firms have no such capacity to pay debt by this measure, on balance. Does not include defaulted private companies whose financials are not publicly available.*

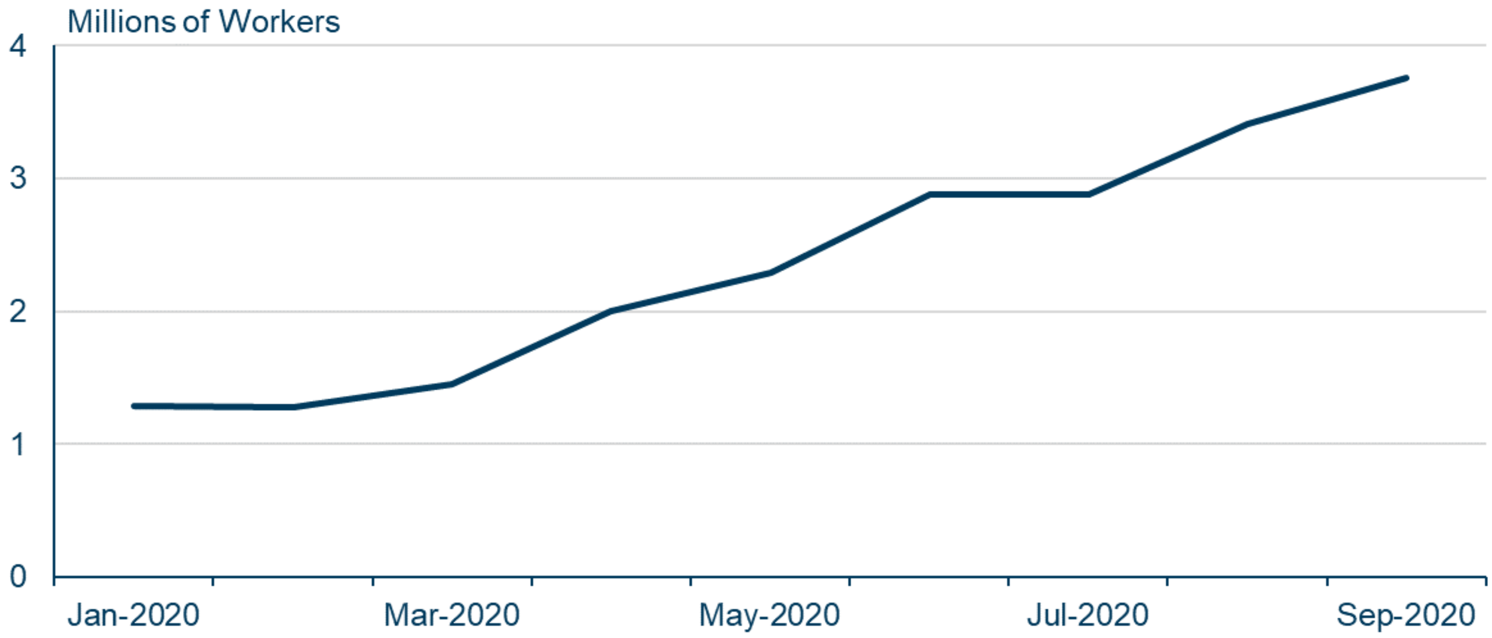
Source: Bloomberg Finance L.P.; CapIQ, S&P Global Market Intelligence; Compustat, S&P Global Market Intelligence; Moodys

Build-up in Leverage

- Corporate sector became more leveraged during the economic recovery over the last decade
- In a downturn, high debt loads can result in more bankruptcies – for example in retail
- Leverage at many retail firms exceeded what is permissible in a program designed for troubled borrowers

Figure 9: Permanent Job Loss

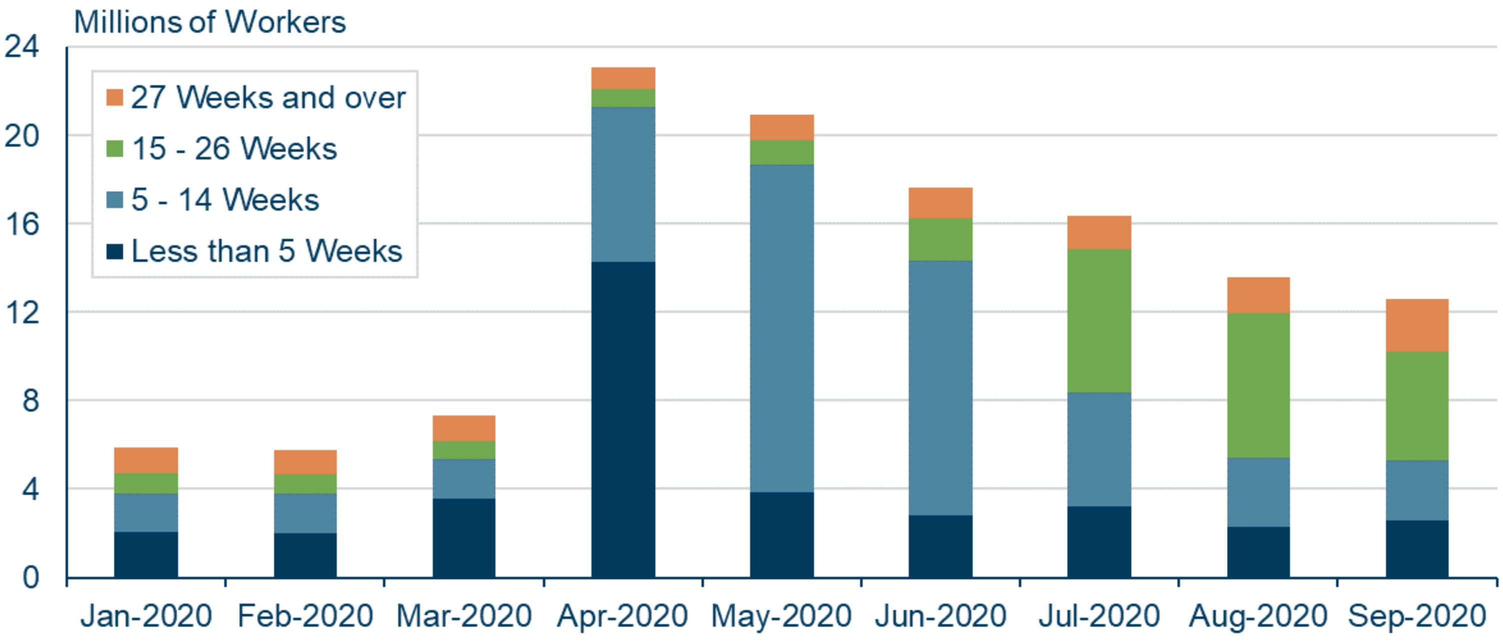
January 2020 - September 2020



Source: BLS, Haver Analytics

Figure 10: Duration of Unemployment

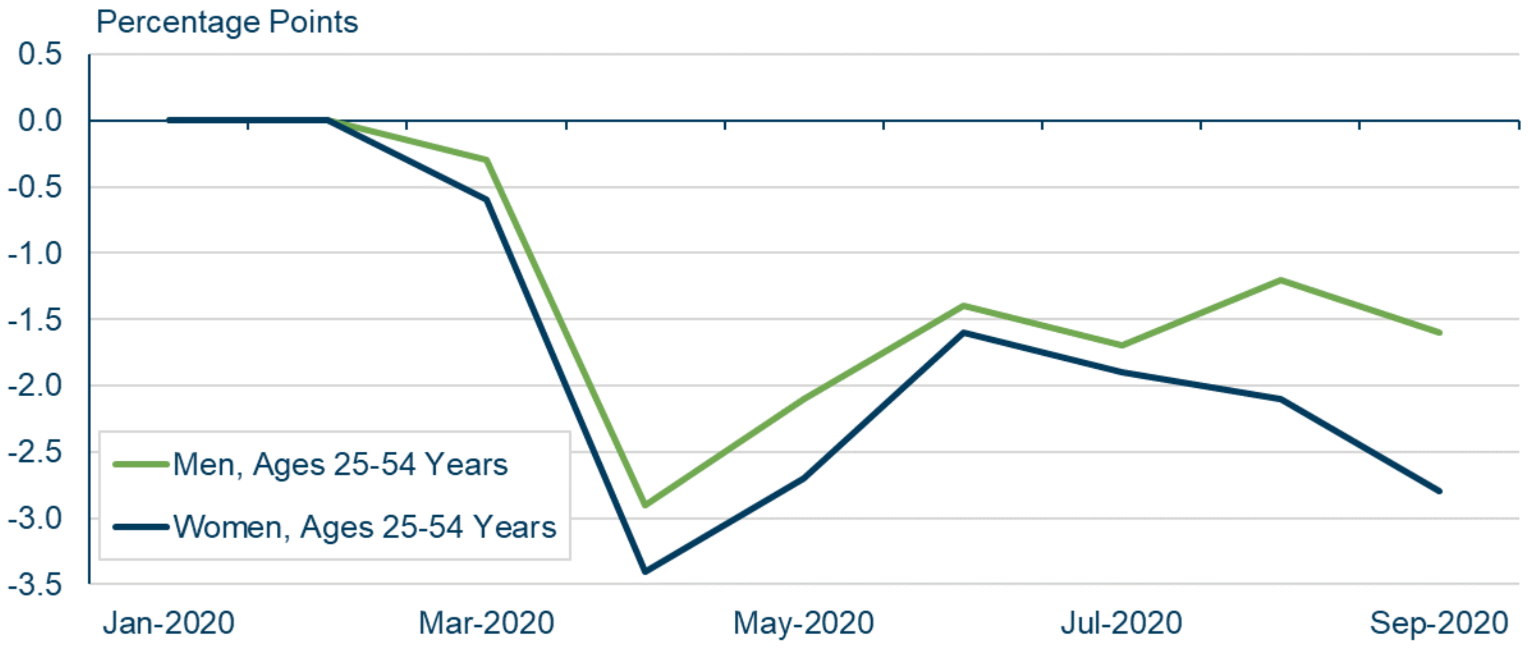
January 2020 - September 2020



Source: BLS, Haver Analytics

Figure 11: Change in the Labor Force Participation Rate Since January for Prime Working Age Men and Women

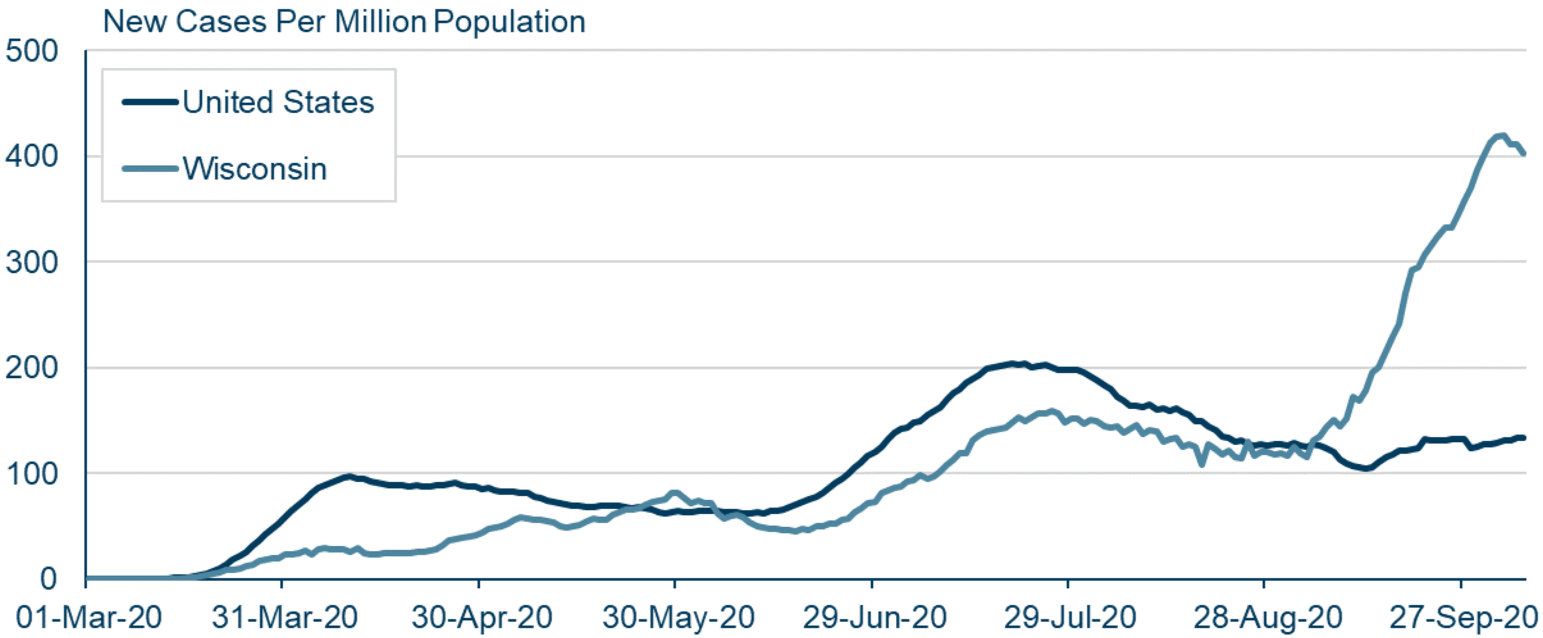
January 2020 - September 2020



Source: BLS, Haver Analytics

Figure 12: New COVID-19 Cases Per Million Population

March 1, 2020 - October 6, 2020



Note: New cases are seven-day moving averages.

Source: Johns Hopkins University

Concluding Observations

- Addressing public health crisis is prerequisite for solving economic crisis
- Build-up of risk – makes economic recovery more difficult
- Policy – need to avoid these build-ups of financial stability risk
  - Need cohesive regulatory and supervisory tools
  - Current tools are quite limited – compared to other countries
  - Need to use tools we have – bank supervision
- Need research into risk-taking behavior that makes the economy more susceptible to protracted downturns
- Urgency underlined by the fact that the impact of these downturns is disproportionately borne by those who can least afford it