ECON UN3265 ▪ MONEY AND BANKING ▪ SUMMER 2026 ▪ SESSION 6

CHAPTER 12

Financial Crises

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Outline

Reading and objectives

- Mishkin, *The Economics of Money, Banking, and Financial Markets*, 13th ed.
- This deck: **Chapter 12** — Financial Crises.
- The payoff chapter: the Chapter 8–11 toolkit — asymmetric information, asset transformation, the safety net, the shadow banking system — assembled to explain why crises happen and why they devastate the real economy.

Learning objectives

12.1 Define a *financial crisis*.

12.2 Identify the three stages in the dynamics of a financial crisis.

12.3 Describe the causes and consequences of the global financial crisis of 2007–2009.

12.4–12.5 Summarize the regulatory response, and the gaps that remain.

PART 1

Anatomy of a Financial Crisis

What is a financial crisis?

Definition

A **financial crisis** occurs when there is a particularly large disruption to *information flows* in financial markets — so that financial frictions rise sharply and markets stop channeling funds to those with productive uses.

- The disease is the same one from Chapter 8 — **asymmetric information** — but in an acute, system-wide flare-up.
- When lenders can no longer tell good borrowers from bad, adverse selection and moral hazard spike, and lending simply *stops*.
- The result is a collapse in the flow of credit to the real economy — and a sharp recession.

Mishkin Ch. 12, Section 12.1.

The three stages

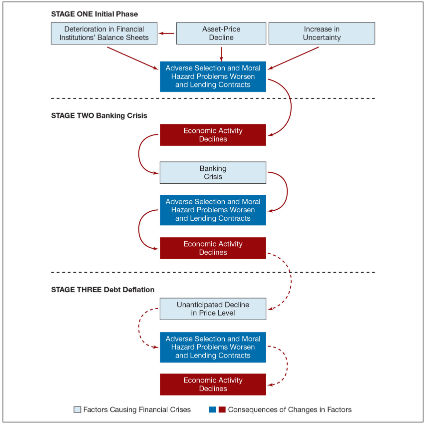
Crises in advanced economies tend to move through three stages:

1. **Stage 1 — Initiation.** Triggered by one of three things:
   - Credit boom and bust (mismanaged financial liberalization / innovation),
   - Asset-price boom and bust (a bubble that pops),
   - A general spike in uncertainty.
2. **Stage 2 — Banking crisis.** Insolvencies and bank panics; surviving banks deleverage.
3. **Stage 3 — Debt deflation.** An unanticipated fall in the price level raises the *real* burden of debt.

The figure on the next slide is the single most important diagram in the chapter.

Mishkin Ch. 12, Section 12.2.

Figure 1 — Sequence of events in financial crises



Mishkin Ch. 12, Figure 1. Blue = factors causing the crisis; red = consequences. Each stage feeds the next via worsening adverse selection and moral hazard.

Stage 1: how a crisis gets started

Three common triggers, each working through the *same* channel — worsening asymmetric information.

- **Credit boom and bust.** Liberalization or innovation outruns the risk-management and regulatory capacity to handle it; a lending boom turns into a bust as bad loans surface.
- **Asset-price boom and bust.** A bubble inflates (often credit-fueled); when it bursts, firms' net worth collapses, gutting the collateral that solved adverse selection and the equity stake that solved moral hazard.
- **Rise in uncertainty.** A failure of a major firm, a recession, or a market crash makes it harder for lenders to screen — so they pull back from *everyone*.

Mishkin Ch. 12, Section 12.2.

Stages 2 and 3: banking crisis and debt deflation

Stage 2 — Banking crisis.

- Deteriorating balance sheets push some banks into insolvency.
- Inability to tell solvent from insolvent banks ⇒ a **bank panic** (Ch. 10): contagion, runs, fire-sales.
- Surviving banks deleverage; credit to the economy contracts further.

Stage 3 — Debt deflation.

The Irving Fisher mechanism

If the crisis produces an *unanticipated* decline in the price level, the real value of firms' and households' *nominal debt rises*, while the value of their assets does not. Net worth falls in real terms — adverse selection and moral hazard worsen yet again, deepening and prolonging the downturn.

Mishkin Ch. 12, Section 12.2; Fisher (1933).

PART 2

The Great Depression

The mother of all financial crises

The Great Depression is the textbook illustration of all three stages running to completion.

- **Stock-market crash** (Oct. 1929) — asset-price bust, a spike in uncertainty.
- **Bank panics** (1930–33) — roughly a third of U.S. banks failed; no effective lender of last resort acted.
- **Continuing decline in stock and asset prices** — balance sheets kept deteriorating.
- **Debt deflation** — the price level fell about 25%, mechanically raising the real debt burden.

The result: the worst economic contraction in U.S. history — output down $\approx$30%, unemployment $\approx$25%.

Mishkin Ch. 12, Section 12.2.

The Depression as a Stage 1–2–3 cascade

- **Stage 1:** the 1929 crash and rising uncertainty cut firms' net worth and froze screening.
- **Stage 2:** four waves of bank panics (1930, 1931, 1932, 1933). The Fed, the new lender of last resort, *failed to act* — a catastrophic policy error.
- **Stage 3:** sustained deflation of roughly 25% over 1930–33 turned a severe recession into a decade-long depression.

The lesson policymakers took

Do *not* let the banking system collapse, and do *not* let prices spiral down. This lesson is exactly why 2007–09 ended differently.

Mishkin Ch. 12, Section 12.2; Friedman & Schwartz.

PART 3

The Global Financial Crisis, 2007–2009

Causes: innovation in the mortgage market

The 2007–09 crisis began with financial innovations from Chapter 11 applied to housing.

- **Subprime mortgages** — lending to borrowers with weak credit, made feasible (in theory) by credit scoring and securitization.
- **Mortgage-backed securities (MBS)** — pools of mortgages turned into tradable bonds.
- **Collateralized debt obligations (CDOs)** — securities built *from* MBS and other debt, sliced into risk *tranches*.

A flood of liquidity — global capital surging into the U.S. — plus the subprime boom drove a **housing-price bubble**.

Mishkin Ch. 12, Section 12.3.

Causes: agency problems in "originate-to-distribute"

Securitization changed the lender's incentives in a fatal way.

The originate-to-distribute model

The mortgage broker who *originates* a loan immediately *sells* it on to be securitized — so the broker bears *none* of the default risk. A classic principal–agent problem: the agent (broker) earns fees on *volume*, not on loan *quality*.

- Borrowers had little incentive to disclose their true ability to pay ("liar loans").
- Banks and investors had weak incentives to assess the securities they were churning out.
- **Credit-rating agencies** were paid by the issuers they rated — a conflict of interest — and stamped AAA on tranches that were anything but.

Mishkin Ch. 12, Section 12.3.

What is a CDO? Tranching, briefly

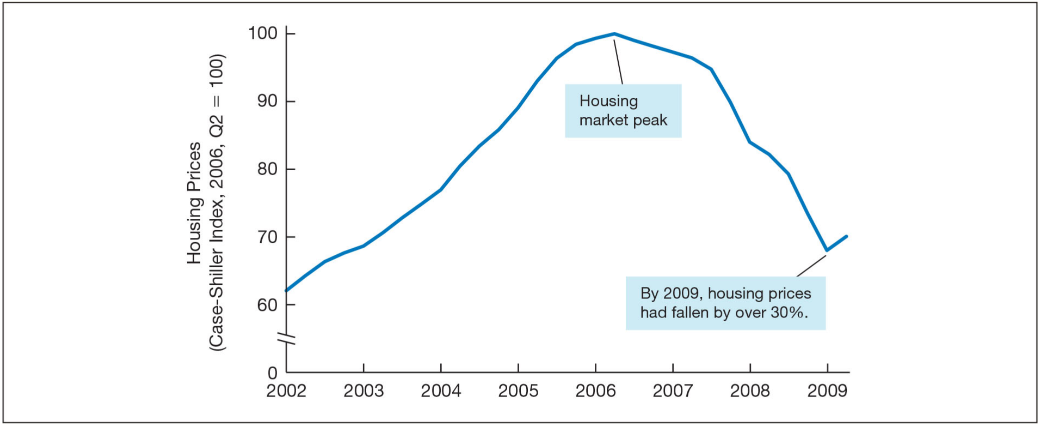
- A **special purpose vehicle (SPV)** buys a pool of assets — bonds, loans, mortgage-backed securities.
- It carves the pool's cash flows into **tranches** of differing risk.
- **Super-senior tranches** are paid first — lowest risk, highest rating.
- The **equity tranche** absorbs the first losses — highest risk, often untraded.

Why this mattered

Tranching *promised* to manufacture safe AAA assets out of risky mortgages. But it also made the securities so *complex and opaque* that no one could value them once doubt set in — a manufactured asymmetric-information bomb.

Mishkin Ch. 12, Section 12.3 (FYI box).

Figure 4 — Housing prices and the crisis



Mishkin Ch. 12, Figure 4. The Case–Shiller index peaked in 2006; by 2009 prices had fallen over 30%. Source: FRED.

The bubble bursts and the shadow banks run

- Housing prices peaked in 2006 and began a long decline (Figure 4).
- Falling prices $\Rightarrow$ rising mortgage defaults $\Rightarrow$ deteriorating balance sheets at every institution holding MBS and CDOs.
- This triggered a **run on the shadow banking system** (Ch. 11) — but not a classic depositor run.

A run through repo and haircuts

Shadow banks funded long-term assets with overnight **repurchase agreements (repo)**. As collateral grew suspect, lenders demanded bigger **haircuts** — more collateral per dollar lent — or refused to roll over the loan at all. That *is* a bank run, conducted in the wholesale market.

Mishkin Ch. 12, Section 12.3.

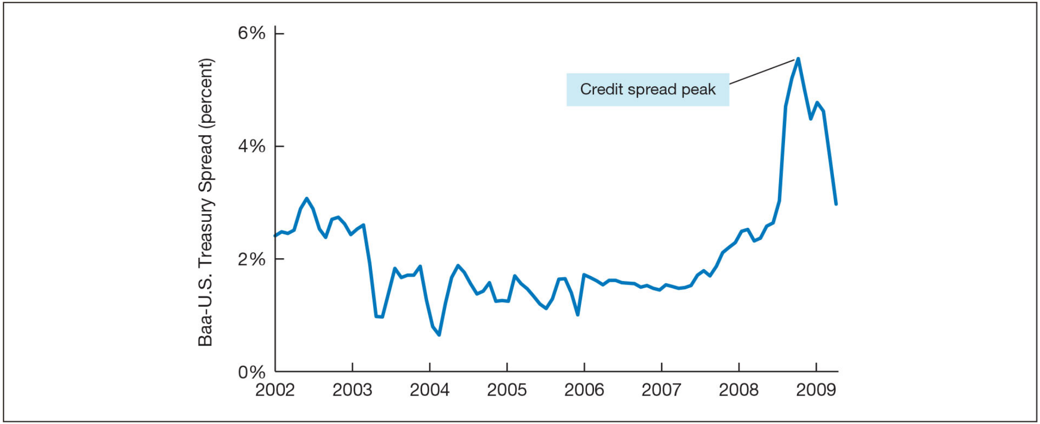
The crisis goes global, and firms fail

Globalization of the panic. Foreign banks held U.S. mortgage securities, so losses spread worldwide. The **TED spread** — the gap between the 3-month Eurodollar rate and 3-month Treasuries, a gauge of bank-credit fear — jumped from about 40 basis points to nearly 240 in August 2007. **High-profile failures, in sequence:**

- **Bear Stearns** — March 2008 (absorbed by JPMorgan).
- **Fannie Mae and Freddie Mac** — July 2008 (taken into conservatorship).
- **September 2008:** Lehman Brothers fails; Merrill Lynch absorbed; AIG bailed out; the Reserve Primary Fund "breaks the buck"; Washington Mutual fails.

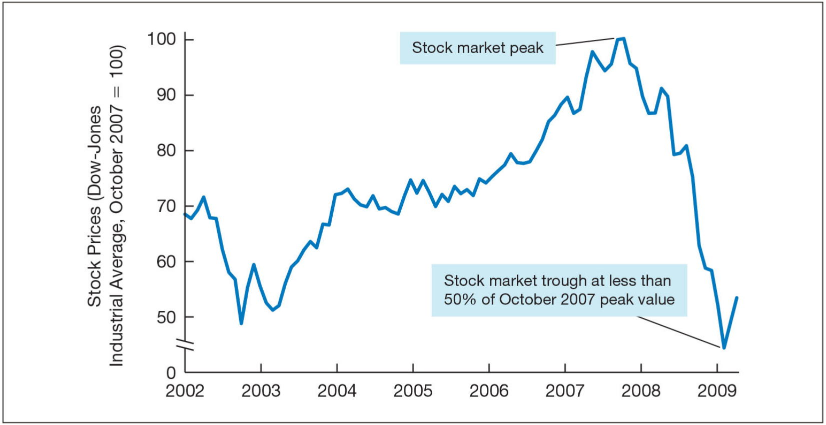
Mishkin Ch. 12, Section 12.3.

Figure 6 — Credit spreads spike, 2007–2009



Mishkin Ch. 12, Figure 6. The Baa–Treasury spread leapt from ≈2% to nearly 6% — adverse selection priced in real time. Source: FRED.

Figure 5 — Stock prices collapse, 2007–2009



Mishkin Ch. 12, Figure 5. The Dow fell to less than half its October 2007 peak. Source: FRED.

The height of the crisis and the Great Recession

- The stock-market crash accelerated in the fall of 2008 — the week of October 6, 2008 was the worst weekly decline in U.S. history (Figure 5).
- Surging borrowing costs (Figure 6) caused sharp drops in consumer spending and business investment.
- Unemployment rose above **10%** in late 2009 — the **Great Recession**, the deepest U.S. contraction since World War II.

But *far* milder than the Great Depression — because this time, policymakers had read the 1930s playbook and did the opposite.

Mishkin Ch. 12, Section 12.3.

Was the Fed to blame for the bubble?

A genuine, unresolved debate worth knowing both sides of.

- **Taylor's critique:** the Fed held the federal funds rate too low in 2003–06; low mortgage rates stoked housing demand and subprime issuance, inflating the bubble.
- **Bernanke's rebuttal:** the real culprits were new mortgage products that lowered initial payments, lax lending standards, and a "global saving glut" — capital inflows from emerging markets — not monetary policy.

The debate over whether monetary policy caused the bubble continues to this day — and it shapes how central banks think about "leaning against" asset prices.

Mishkin Ch. 12, Section 12.3 (Inside the Fed).

Government intervention and the recovery

Because government and central banks intervened aggressively, the Great Recession was *far* smaller than the Great Depression.

- **TARP** — the Troubled Asset Relief Program, the core of the Emergency Economic Stabilization Act (Oct. 2008) — authorized the Treasury to spend up to $700 billion buying troubled assets or injecting **capital** directly into banks.
- The Fed acted as an aggressive lender of last resort and slashed rates to zero.
- A $787 billion fiscal **stimulus** followed in February 2009.

The contrast with 1929–33

Banking system propped up, not allowed to collapse; deflation prevented. Stages 2 and 3 were cut short — exactly the Depression lesson, applied.

Mishkin Ch. 12, Section 12.3.

PART 4

Regulation After the Crisis

Macroprudential vs. microprudential

The crisis exposed a blind spot in how we regulate.

Two lenses

Microprudential supervision asks: is *this individual bank* safe? **Macroprudential** supervision asks: is the *system as a whole* safe — even if every bank looks fine on its own?

- In 2007–09, individually "safe" actions — everyone selling assets and deleveraging at once — were collectively catastrophic (fire-sale spirals).
- Post-crisis regulation added a *systemic* layer on top of bank-by-bank supervision.

Mishkin Ch. 12, Section 12.4.

Dodd-Frank (2010)

The main U.S. regulatory response. Six pillars worth remembering:

- **Consumer protection** — created the Consumer Financial Protection Bureau (CFPB).
- **Annual stress tests** — can each big bank survive a severe scenario?
- **Resolution authority** — an orderly way to wind down a failing systemic firm (an alternative to "bail out or chaos").
- **Systemic-risk regulation** — the Financial Stability Oversight Council (FSOC) watches the whole system.
- **Volcker Rule** — bars banks from proprietary trading.
- **Derivatives** — push standardized derivatives onto central clearinghouses and exchanges.

Mishkin Ch. 12, Section 12.4.

The unsolved problem: too big to fail

Dodd-Frank tried to end too-big-to-fail (Ch. 10), but the problem is not fully solved. Three proposed approaches:

1. **Break up** the largest institutions, so no single failure is systemic.
2. **Much higher capital requirements** for the biggest banks — make them bear their own risk.
3. **Rely on Dodd-Frank** — resolution authority and systemic oversight — to manage failures without bailouts.

Open frontiers

Gaps remain in consumer protection, resolution, the Volcker Rule, derivatives, the government-sponsored enterprises (Fannie and Freddie), and the conflicted credit-rating agencies. The cat-and-mouse game of Chapter 10 continues.

Mishkin Ch. 12, Sections 12.4–12.5.

PART 5

Emerging-Market Crises

Crises in emerging markets: the same theory, a currency twist

The asymmetric-information framework also explains the frequent, devastating crises in emerging markets — with two extra ingredients.

- **Stage 1:** a credit boom (often funded by *foreign-currency* borrowing under a fixed exchange rate) *or* severe fiscal imbalances (governments forcing banks to hold weak government debt).
- **Stage 2 — Currency crisis.** Deteriorating bank balance sheets and speculative attacks force a **devaluation**; the central bank can't defend the peg without bankrupting its banks.
- **Stage 3:** devaluation explodes the local-currency value of *foreign-currency debt* — net worth collapses, inflation surges, and a full-blown crisis follows.

Mishkin Ch. 12, Web Chapter 1.

Applications and prevention

Case studies:

- **South Korea, 1997–98 —** mismanaged liberalization; *chaebol* over-borrowing; currency crisis $\Rightarrow$ deep contraction, then recovery.
- **Argentina, 2001–02 —** severe fiscal imbalances; bank panic; the currency-board peg collapsed.
- **Iceland, 2008 —** a *wealthy* country that crised like an emerging market: liberalization, currency mismatch, capital flight.

Preventing emerging-market crises

Strengthen prudential regulation and supervision; encourage disclosure and market discipline; **limit currency mismatch**; and **sequence** financial liberalization carefully rather than opening up all at once.

Mishkin Ch. 12, Web Chapter 1.

PART 6

Wrap-up

Key terms from Chapter 12

- financial crisis
- three stages: initiation, banking crisis, debt deflation
- credit boom and bust; asset-price bubble
- debt deflation (Fisher)
- subprime mortgage; MBS; CDO; tranche
- originate-to-distribute model
- principal–agent problem; rating agencies
- shadow-bank run; repo; haircuts
- TED spread; credit spread
- TARP; Great Recession
- macro- vs. microprudential
- Dodd-Frank; CFPB; FSOC; Volcker Rule

The one idea to take away

A financial crisis is asymmetric information going critical

Every crisis is the same disease in acute form: a shock destroys net worth and information, adverse selection and moral hazard spike, lending stops, the real economy contracts — and the contraction feeds back to destroy more net worth. The three stages are just that feedback loop running its course.

- This closes Part III on financial institutions. We have now used *every* tool from Chapters 8–11 — information, asset transformation, the safety net, the shadow banking system — to explain 1929 and 2008.
- Next: **Chapter 13** — Central Banks and the Federal Reserve System, opening Part IV on monetary policy.