REAL ESTATE BOOMS, RECESSIONS AND FINANCIAL CRISES

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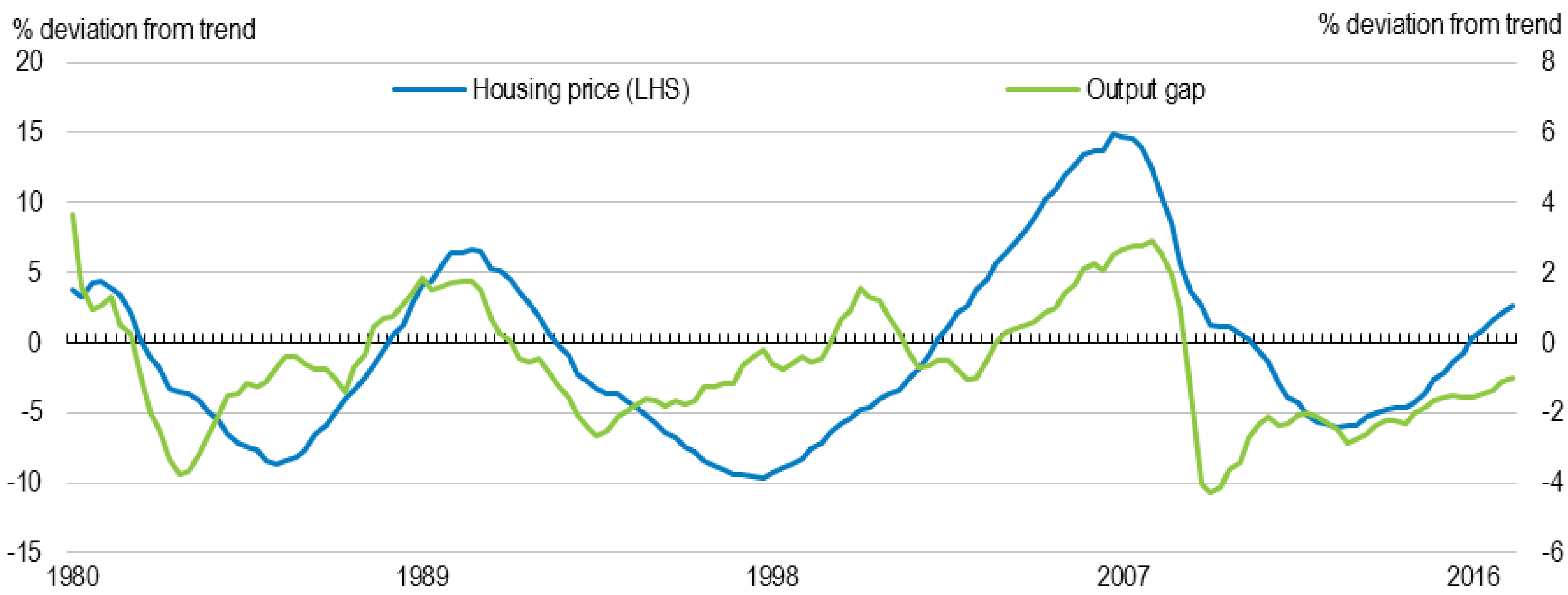
BETTER POLICIES FOR BETTER LIVES

Outline of the presentation

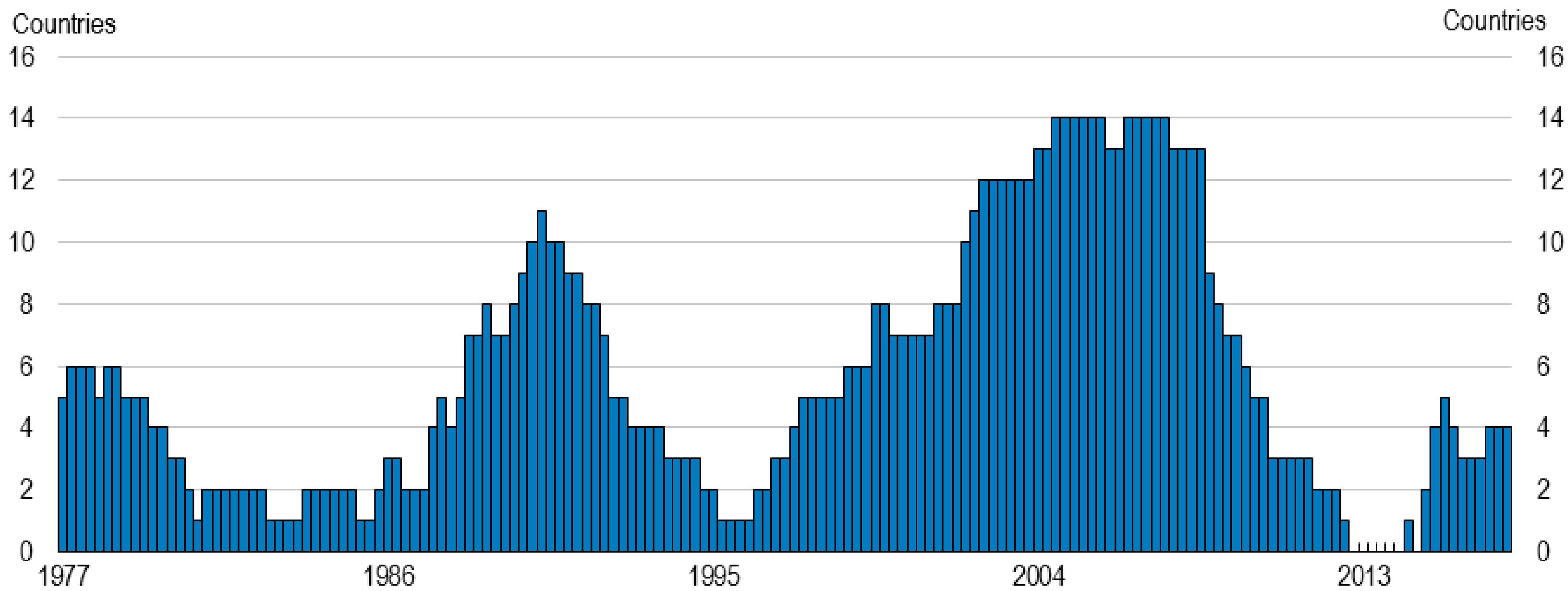
- Real housing price cycles in OECD countries
- Real estate and financial crises: an historical overview
- Mechanisms at play in a typical boom-bust real estate cycle
- Policy responses: prevention and crisis management

Housing and business cycles



Note: The sample covers 18 OECD countries for which housing price data are available since the early 1970s. The housing price trend is a linear trend.
Source: OECD Analytical house prices and Economic Outlook databases.

Number of countries with housing prices rising more than 25% over the past 5 years



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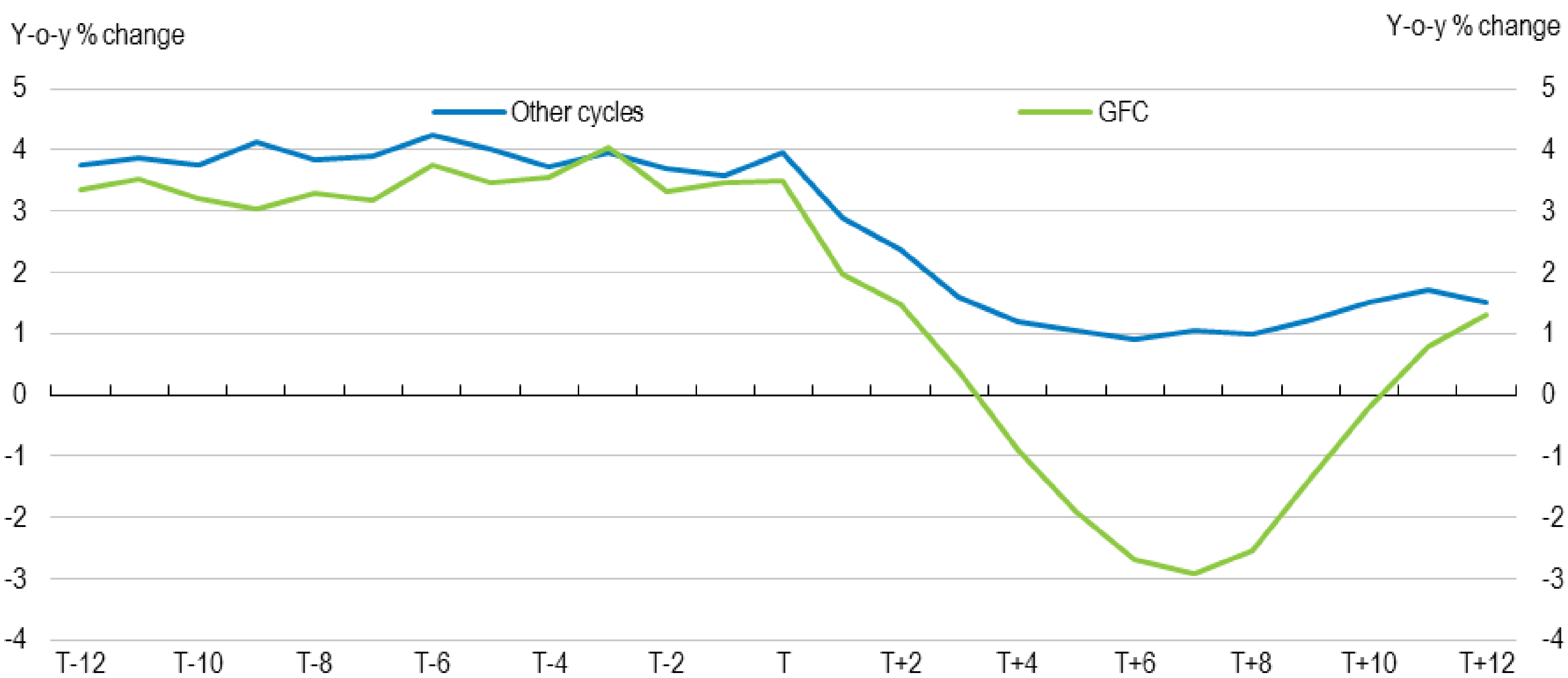
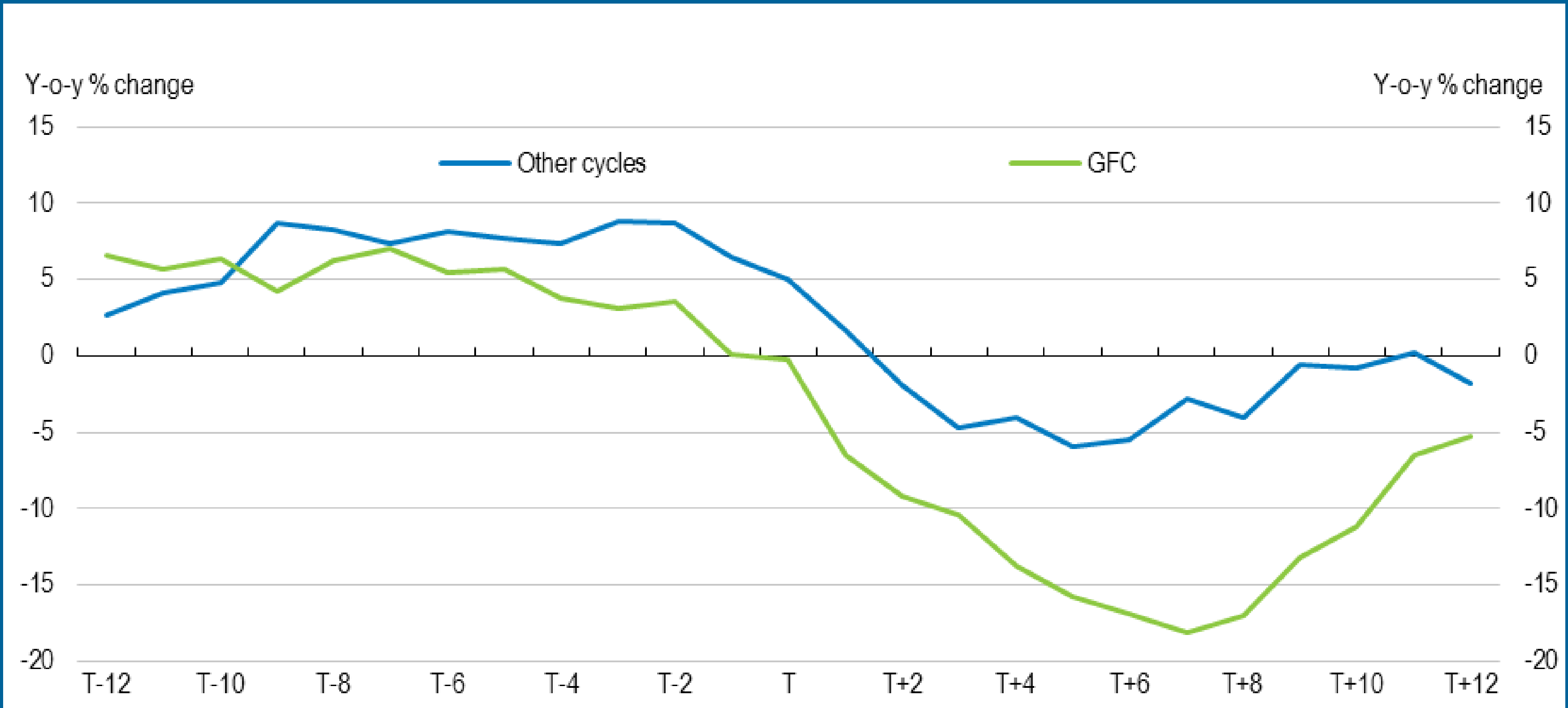
GDP around cycle peaks



Note: T corresponds to the quarter of the housing prices cycle peak. GFC refers to the cycle with a peak between 2006Q4 and 2008Q3 depending on the country; Other cycles refer to all the other major cycles (defined as those where housing prices decline by at least 15%) identified since 1970. The numbers are averages over countries at the same point of the cycle.

Source: OECD Analytical house prices and Economic Outlook databases.

Residential investment around cycle peaks



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Real estate and financial crises: an historical overview

- The Spanish banking crisis of the 1970s
- The US Savings and Loans crisis
- The Japanese asset price bubble
- The Nordic banking crisis
- The Asian financial crisis
- The global financial crisis and the Great Recession

The Spanish banking crisis of the 1970s

- 1974: Banks allowed to open branches nationwide and interest rates deregulated
- Negative real interest rates
- Real housing prices: 1976Q2-1978Q2: +28%; 1978Q2-1982Q2: -35%
- Banks heavily exposed to real estate
- More than 50 banks were liquidated, merged or nationalised (almost half of the banks; 20% of deposits)

The US Savings and Loans crisis

- 1970s: Inflation; interest rate regulations
- Early 1980s: deregulation – interest rates; investments
- Risky investments: land, commercial real estate, junk bonds
- Regulatory forbearance -> S&Ls with little capital
- Real commercial real estate prices: 1977Q2-1982Q2: +12%; 1982Q2-1995Q3: -40%
- Resolution: FIRREA (1989); Resolution Trust Corporation
- Limited macroeconomic impact
- Major transformation in US real estate finance

The Japanese asset price bubble

- Second half of the 1980s: stock market and real estate bubble (Nikkei multiplied by 3 over 4 years to peak; Real urban land prices: +38% over 5 years to peak)
- Accommodative monetary policy / capital inflows / deregulation
- Collateral and bank capital: financial accelerator
- Late 1989: restriction on bank real estate lending
- Early 1990s: equity and real estate prices collapse (Nikkei: -60% by Aug. 92; Urban land prices: -25% by 2000; -60% by 2017)
- Lasting impact on GDP growth: annual average 1970-90: 4.5%; 1990-2016: 1%; deflation
- 1998: Measures to restore the stability of the banking system (recapitalisation; temporary nationalisations; recognition of non-performing loans; asset management companies to restructure corporate debt)

The Nordic banking crisis (Finland, Norway, Sweden)

- Second half of the 1980s: stock market and real estate bubble
- Low interest rates + tax deductibility / capital inflows / deregulation
- Real housing price increases (mid-80s to early 90s peak): 41% to 66% / Commercial real estate prices: in Stockholm +20%/year during the boom
- German reunification: sharp rise in interest rates / Currency crisis – Fixed exchange rates eventually abandoned
- Bank failures: Finland: savings banks; Norway: 3 biggest commercial banks nationalised; Sweden: Most major banks affected and received some government support
- Large losses on real estate loans: in Sweden 40% to 50% of total bank losses over the period 1990-93, compared to a share of loans of only 10 to 15%
- Asset management companies (“bad banks”) in Finland and Sweden: high recovery rates
- Relatively rapid (export-led) economic rebound

The Asian financial crisis (Indonesia, Korea, Malaysia, Thailand)

- Strong growth; Foreign direct investment in the 1990s
- Capital account liberalisation and financial market deregulation
- Capital inflows, largely short-term, in foreign currency and intermediated by local banks
- Close relations banks-non financial corporations / government policies
- Loss of competitiveness: low productivity investments; US dollar appreciation from 1995 (*de facto* pegged currencies); fall in semi-conductors prices
- Real estate bubbles in Thailand and Malaysia, to a lesser extent Indonesia, none in Korea
- Relatively rapid return to growth, but several years needed to regain pre-crisis GDP levels

The global financial crisis and the Great Recession

- Boom period
  - Low interest rates
  - Changes in regulations (esp. 2004 SEC ruling and 2000 CFMA)
  - Increase in leverage
  - Expansion of structured finance and derivatives
  - Expansion of US private-label RMBS market
  - Increase in maturity (and in some cases currency) mismatches
  - Innovations in mortgage markets
  - Global real estate boom

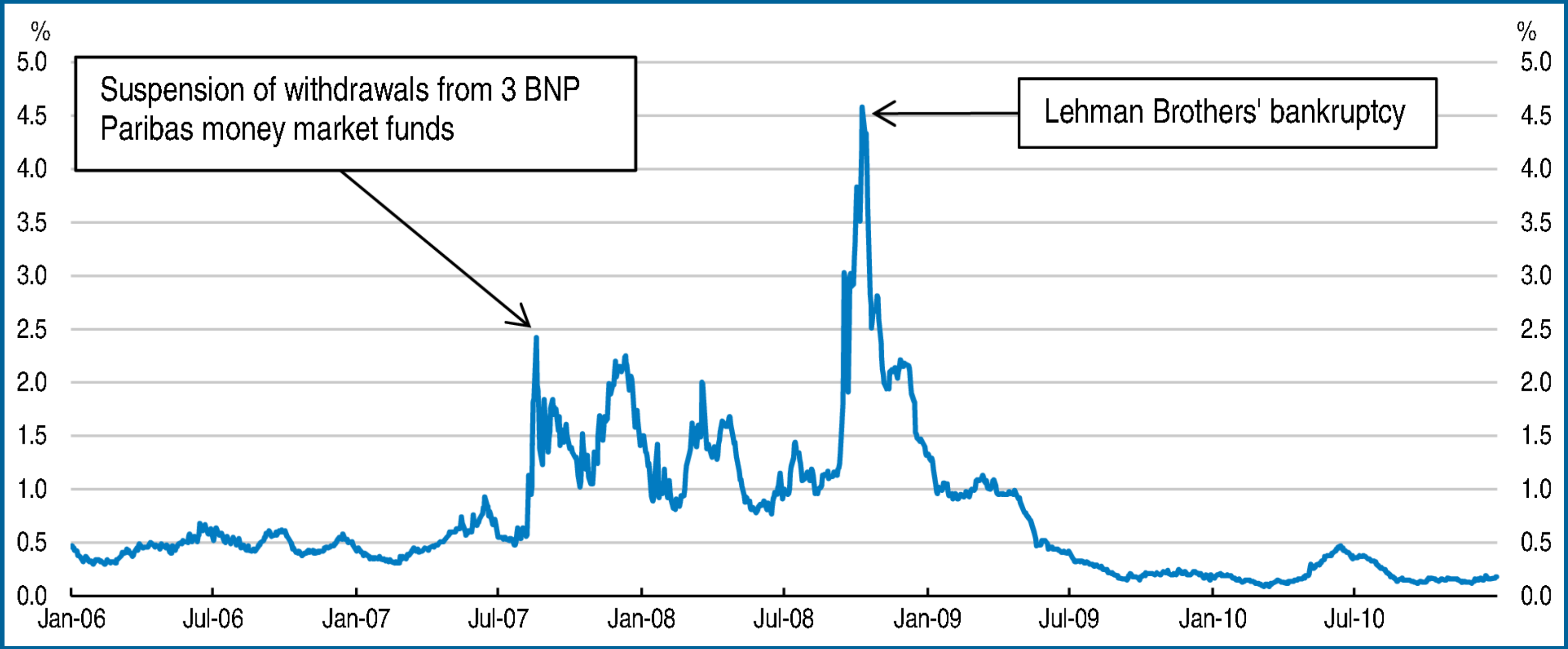
- Crisis period
  - Subprime market collapse
  - Diffusion: money market disruption; financial institutions failures; asset prices collapse; impact on the real economy
  - Massive policy intervention

Global financial crisis: Chronology

- Late 2006: Housing prices start falling in some US states
- First half of 2007: Failure of subprime lenders
- August: 3 BNP Paribas money market funds suspended
- September: Run on Northern Rock
- March 2008: Bear Stearns taken over by JP Morgan Chase
- September: Lehman Brothers bankruptcy; The Reserve Primary Fund breaks the buck
- October: Propagation to European banks

The TED spread during the global financial crisis

Difference between the 3-month LIBOR rate and the 3-month Treasury bill rate

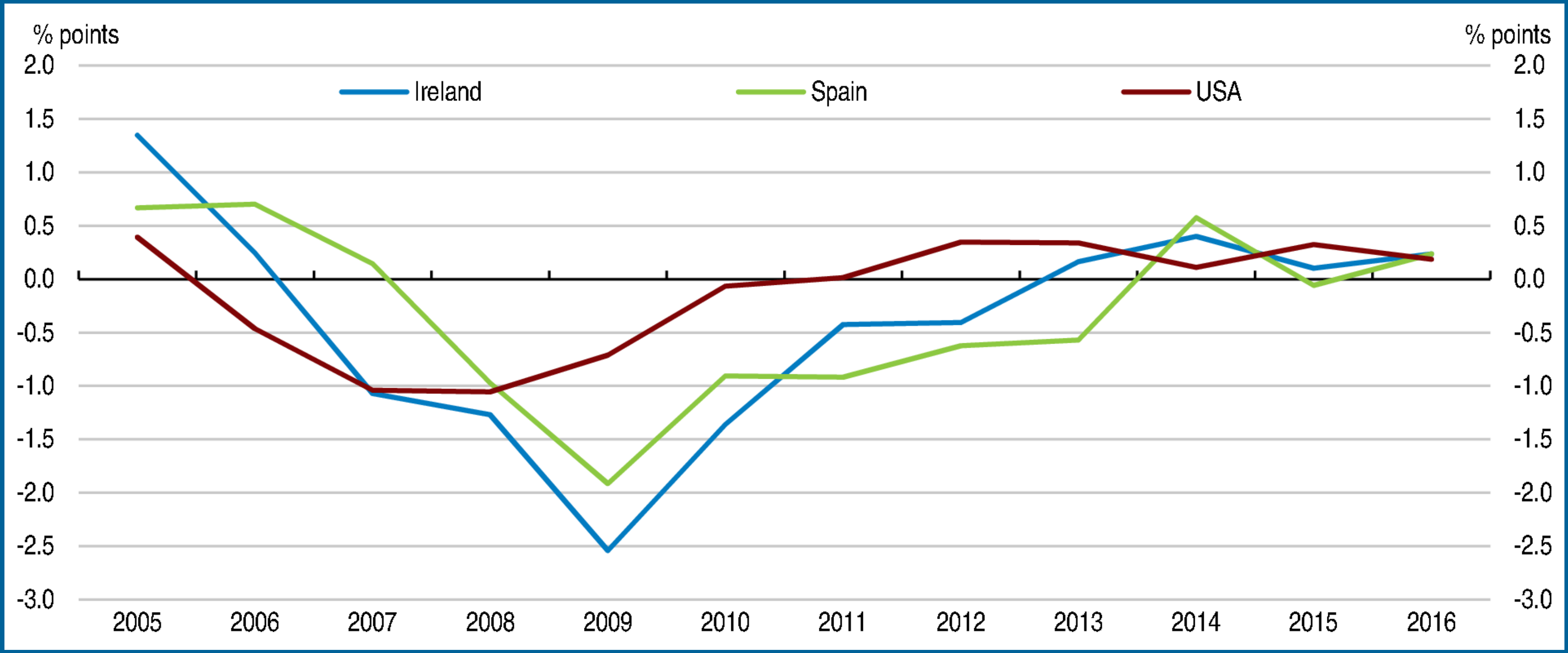


Source: Federal Reserve Bank of St. Louis.

Real estate related crises outside the US

- United Kingdom
  - Mortgage lender failures: high reliance on short-term wholesale funding
  - Limited mortgage defaults
- Ireland
  - Massive construction boom
  - Banks heavily exposed to property development
  - Sept. 2008:Blanket guarantee of bank liabilities
  - Most banks nationalised and recapitalised
  - NAMA: Property-related loans (46% of GDP with 58% haircut)
  - High mortgage arrears, but few foreclosures
- Spain
  - Massive construction boom
  - Banks heavily exposed to property development
  - Savings banks restructuring
  - 2012: EFSF support; SAREB: Distressed assets (5% of GDP)
  - Foreclosures: >4% between 2008 and 2013 (US: about 15%)

Contribution of residential investment to GDP growth



Source: OECD Economic Outlook database.

Real estate related crises outside the US (cont.)

- Iceland
  - Mortgage market deregulated in 2004
  - Aug. 2004-Oct 2007: ΔReal housing prices>50% (Reykjavik)
  - Mortgages linked to inflation or foreign currencies
  - Bank assets >10 x GDP in 2008 (Mortgages>100% of GDP)
  - The 3 major bank collapse in Oct. 2008. Creditors: heavy losses
  - Large mortgage debt restructuring (>12% of GDP written off)

- Hungary
  - About 70% of mortgages in foreign currency in 2008
  - Depreciation of the forint: Δ loan repayment burden = 30-40%
  - Relief schemes: modest impact (complexity, poor targeting)
  - November 2014: conversion of foreign-currency mortgages into forint at the exchange rate of the decision date

Mechanisms at play in a typical boom-bust real estate cycle

- Deregulation / capital inflows
  - Competition with insufficient attention to risks / inadequate prudential rules and supervision
  - Real estate demand shock
- Extrapolative expectations
- Financial accelerator
- Financial innovations loosen borrowing constraints
- Speculation
- The bubble bursts

Policy responses: prevention and crisis management

- Prevention
  - Deregulation: timing and prudential framework
  - Monitoring of non-bank sector (incl. circumvention) and financial innovation (micro/macro-prudential tools)
  - Countercyclical macroeconomic policies
  - Housing policy: structural weaknesses can amplify cycles
- Crisis management
  - Liquidity support and guarantees of bank liabilities
  - Recapitalisation/restructuring of distressed institutions
  - Macroeconomic policy stimulus
  - Non-financial sector debt restructuring , incl. mortgage debt

Conclusions

- Real estate plays an important role in the business cycle
- Housing investment is a small but volatile component of GDP, construction is labour intensive, financial institutions are sometimes heavily exposed to real estate development
- Housing/mortgages: Large share of household wealth/debt; impact on consumption
- Real estate is prone to bubbles: Slow supply response, extrapolative expectations, leverage, speculation
- Real estate bubbles contribute heavily to many financial crises, but are neither a necessary nor a sufficient condition

THANK YOU !

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