



BANK FOR INTERNATIONAL SETTLEMENTS

Information on commercial property prices for policy use: opportunities and challenges

Bruno Tissot

Head of Statistics and Research Support, BIS

Head of the Secretariat of the Irving Fisher Committee on Central Bank Statistics (IFC)

Workshop on Commercial Property Price Indices

Session 1 - Recent Developments in the Commercial Property Markets

Turkey, 7-8 May 2018

The views expressed are those of the author and do not necessarily reflect those of the BIS or the IFC.



Overview

1. CPPI and economic analyses
2. CPPI and policy use
3. CPPI in the international agenda
4. (Large) collection efforts deserved if information content is specific / reliable / useful
5. Conclusion



1. CPPI information and Macro analyses

- Direct **economic impact**

- Rising prices and demand for new construction
- Stimulate credit demand for purchasing properties
- Wealth effects?

- **Financial accelerator mechanism:** property assets as collateral to get financing

- Credit market imperfection (pricing of credit)
- Moral hazard issues (when loans have to be repaid)

- **Dynamic interactions** between asset prices and credit creation



1. CPPI information and Micro supervision

- **Credit supply:** impact of asset prices on banks' lending decisions
 - Quantities
 - Prices
- **Risk taking**
 - Excessive risk tolerance / imprudent lending in "good times"
 - Difficulty to assess "true", underlying values esp. for commercial property
- **Performance of banks**
 - Profitability and lending margins in the short run
 - Longer run impact: provisions/losses for bad loans (after lags)

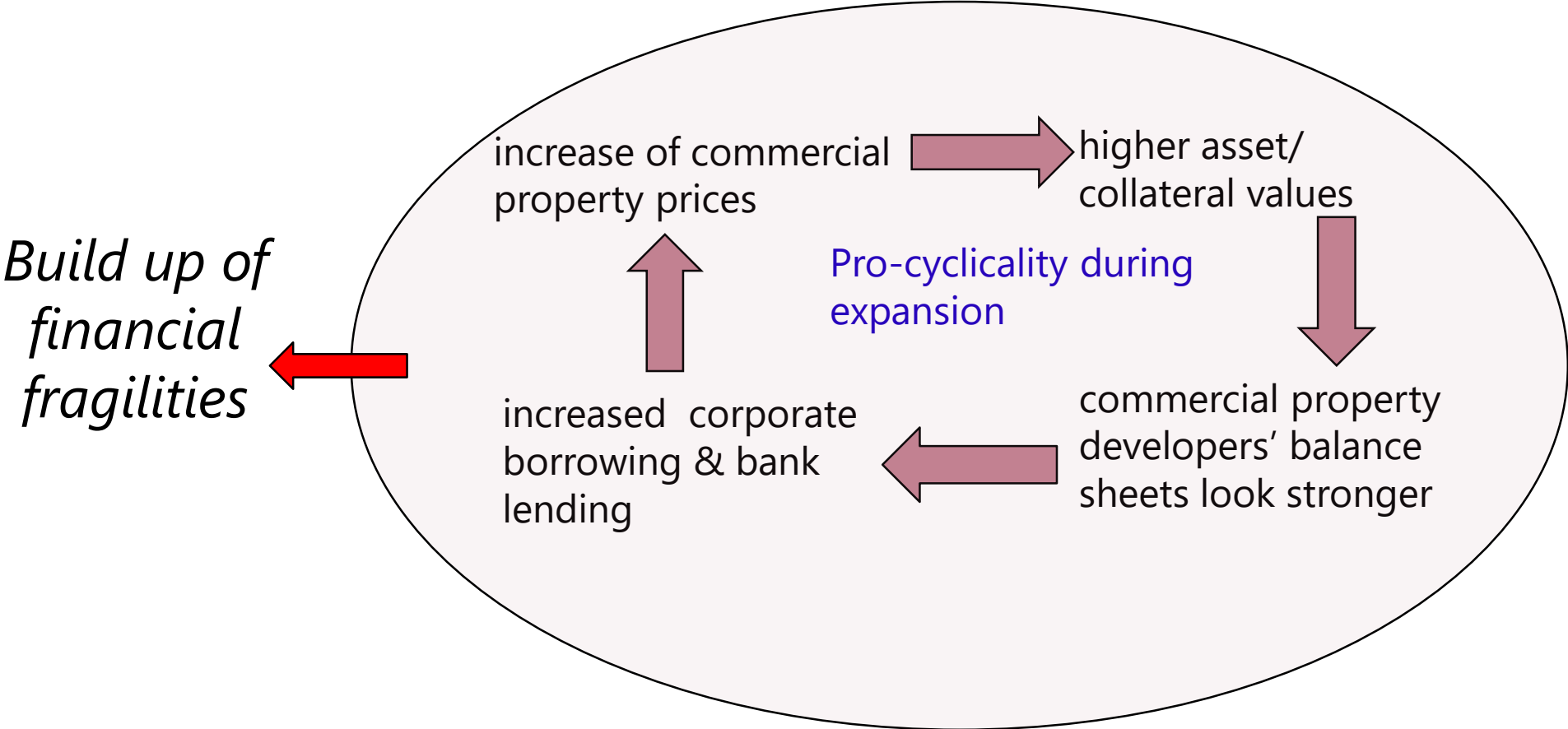


1. CPPI information and financial stability assessments

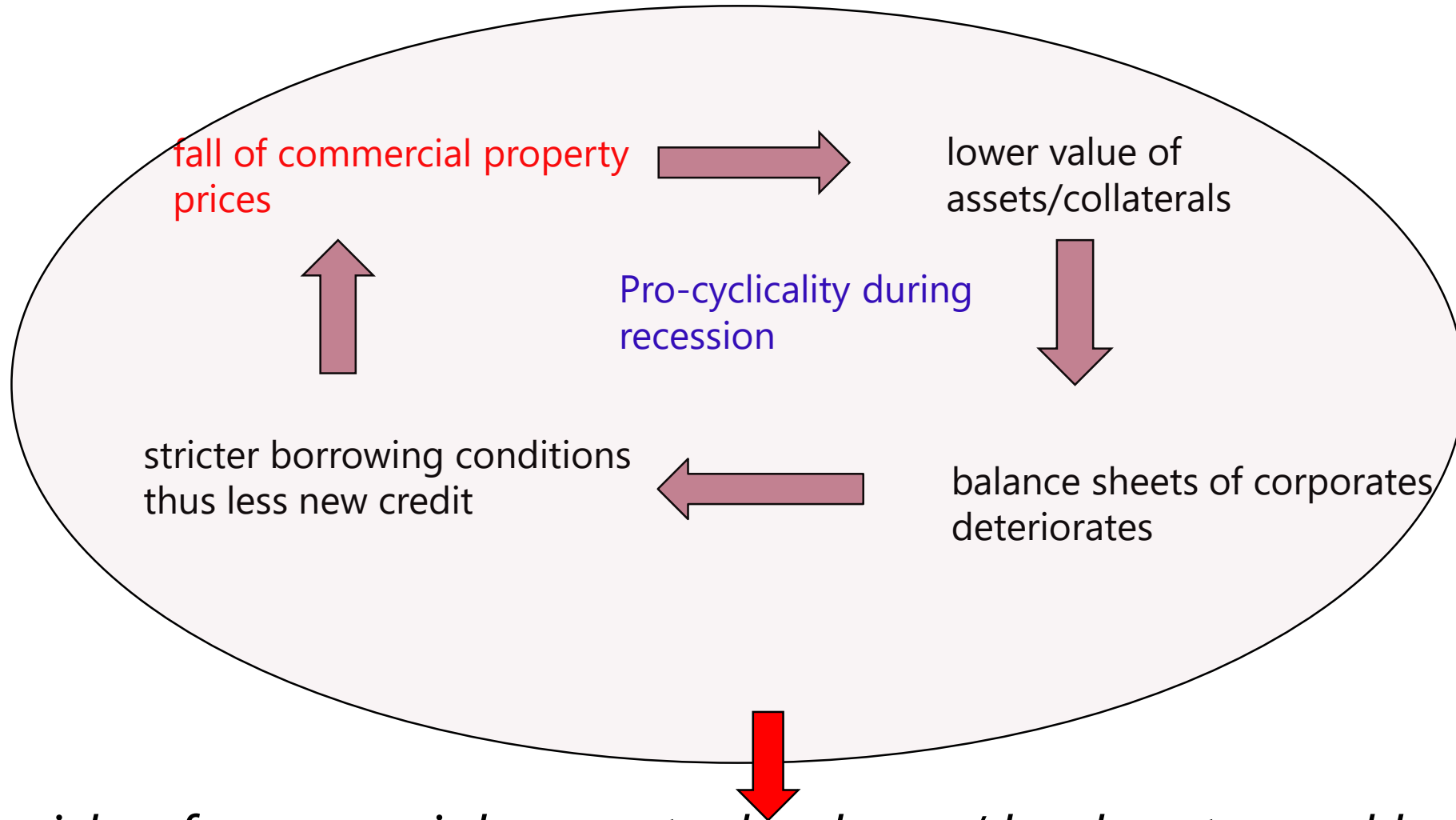
- **Financing cycle:** self-reinforcing forces between
 - Asset prices
 - Financial conditions eg risk premium / appetite
 - Credit demand & supply
 - Perceived loan quality
- Impact on **financial system's soundness:** commercial property as a guarantee and an asset (when invested directly)
- **Turn of the cycle**
 - Underlying vulnerabilities as financial conditions tighten
 - Level of indebtedness matters (non-linearity)



1. Example: increase in CPPI and build up of financial fragilities



1. Example: decline in CPPI and stress in the financial system



Higher risks of commercial property developers' bankruptcy and banks' losses



2. Widespread interest for policy makers...

- **Central banks**

- Demand and inflation
- Monetary policy transmission mechanisms (eg banking intermediation)

- **Micro supervisors**

- Banks
- Other Financial Institutions (regulated or not: shadow banks)

- **Macro prudential** authorities – systemic risk

- Across the financial system
- Over time (pro cyclical)



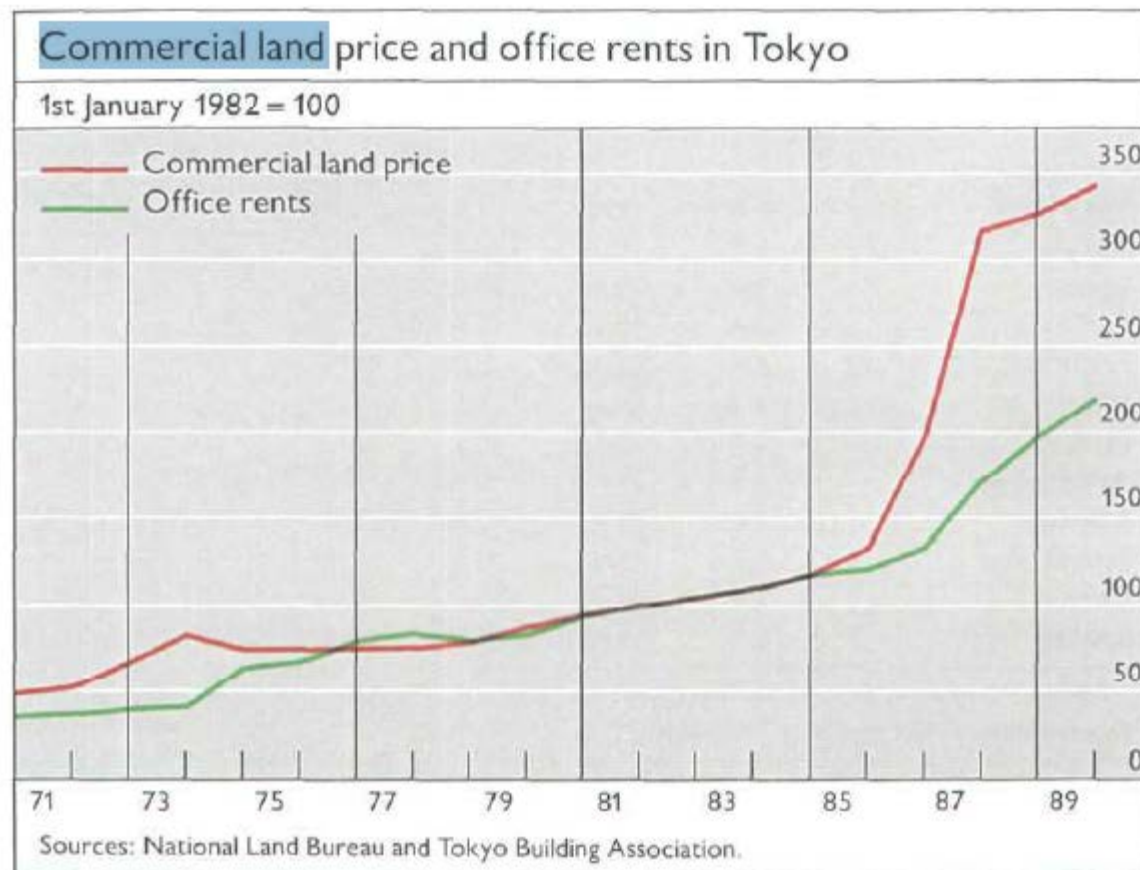
2. ... with some differences

- Property Values affected by **3 factors**: $Val = P * Qual * Quant$
 - P: Price, ideally measured at constant quality
 - Qual: Quality
 - Quant: Quantity
- Policy interest can differ
 - **Monetary** policy: separating price and **volume** ($Vol = Qual * Quant$)
 - **Micro supervision**: evolution of **unit values** ($U Val = P * Qual$)
 - **Macro prudential**: all 3 factors relevant for analysis (eg when characterising a type of property bubble)



3. CPPI in the international agenda: BIS work in the 1980s...

- Not a new topic: BIS analyses started already in the 1980s...



BIS 60th Annual Report (1990)
*The boom in **commercial real estate** in the larger cities also appears to be related to the strong expansion and growing internationalisation of the services sector, in particular of the financial industry. Rapid increases in **office prices and rents** have been associated with the "Big Bang" in London and the transformation of Tokyo into a major international financial centre...*



3. ... the 1990s...

- **Set up of a comprehensive dataset on "aggregate asset price index"**
(including commercial property prices)
- **C.E.V. Borio, N. Kennedy and S.D. Prowse (1994):**

Exploring aggregate asset price fluctuations across countries : measurement, determinants and monetary policy implications, BIS Economic Papers, no 40

Table A1.1
Data sources for price indices

Country	Residential property	Commercial property
Australia	Index of median dwelling prices Source: Central bank	Sydney CBD capital value index Source: Central bank
Belgium	Weighted sales prices of small and medium-sized dwellings Source: Anhyp SA	Capital value price index for Brussels Source: Jones Lang Wootton (JLW)
Canada	Multiple listing service price index of existing homes Source: Central bank	n.a.
Denmark	Price index for residential houses Source: Central bank	Cash price index for production/storage commercial property Source: Central bank
Finland	National house price index Source: Central bank	Price Index for Prime Office Space in Helsinki CBD Source: Central bank
France	Kennedy and Andersen (1994)	Capital value price index for Paris Source: JLW
Germany	Average sales prices of owner-occupied dwellings in Frankfurt, Munich, Hamburg and Berlin Source: Ring Deutscher Makler	Capital value price index for Frankfurt, Munich, Hamburg and Berlin Source: JLW
Japan	National average of residential housing prices Source: Central bank	National average commercial property index Source: Central bank
Netherlands	Prices of residential buildings Source: Central bureau of Statistics	Capital value price index for Amsterdam Source: JLW
Norway	Secondary market national house price index Source: Central bank	Capital value price index for Oslo Source: JLW
Sweden	"Purchase coefficient" of house prices Source: Central bank	Index of commercial buildings Source: Central bank
United Kingdom	Index of house prices (all dwellings) Source: Department of the Environment	Office capital value index Source: Richard Ellis
United States	Median sales price of existing single-family homes Source: National Association of Realtors	Russell-NCREIF Commercial property index Source: NCREIF



3. ... and greater international interest more recently

- IMF Financial soundness Indicators Guide 2006

*"...the Guide does recommend that **separate indices be compiled for residential and commercial real estate**, because of the very different conditions..."*

- **DGI 1** (2011-15):

- Lessons of the Great Financial Crisis
- start methodological work for compilation

- **DGI 2** (2016-20):

- Methodology guide
- BIS dissemination
- Policy use of the indicators



4. Collecting both residential and commercial property prices?

- Significant **efforts required** for compiling CPPIs in addition to RPPIs...
- ... noting **still important challenges** faced in collecting RPPIs
- Worth only if the **information content** is
 - **Specific** (ie different from RPPIs)
 - **Reliable** (ie not too uncertain)
 - **Useful** (for policy)



4. Specific? Information content may not differ too much

- Both prices are **basically reflecting the same 2 cost components**
 - Land (location)
 - Structure (construction costs)
- **Common forces driving residential and commercial prices**
 - State of the economy
 - Financing conditions
 - Building costs
 - Structural factors (building permission, land availability, etc)



4. Reliable? Significant uncertainty related to CPPI measures

- **Various (conflicting) sources**

- Official / private **records**
- **Judgement** esp. in context of banks lending
- Financial market **prices** (funds for certain market segments)
- **Transactions** / stocks

- **Noisy indicators?**

- **Sectoral** heterogeneity (office, retail, industrial, residential properties)
- **Geographical** dispersion
- **Weighting** schemes



4. Useful? Important limitations when analysing CPPI

- **Low number of observations** (large property items)
 - Difficult to **observe** prices for identical items over time
 - **Adjustment** for quality harder
 - Difficult to **analyse** the respective impact of price, quality and quantity
- **Illiquid** markets
 - **Volatile** price signals
 - Indicators more subject to **biases** (role of judgement, importance of idiosyncratic structural factors)
 - **Non-linearity** over time: lower level of transactions during recessions



5. Despite limitations, CPPIs can provide specific, useful information...

- **Different economic purposes**

- Commercial property: underlying activity is to generate **income streams** (eg rented properties, properties used in the production process such as retail premises, factories, offices)
- **Business investment** nature

- **Residential property:** household primary **need for shelter**

- Less rapid **obsolescence**
- Role of **owner occupation** rate



5. ... with distinct, important features

- Greater **correlation with business cycles**

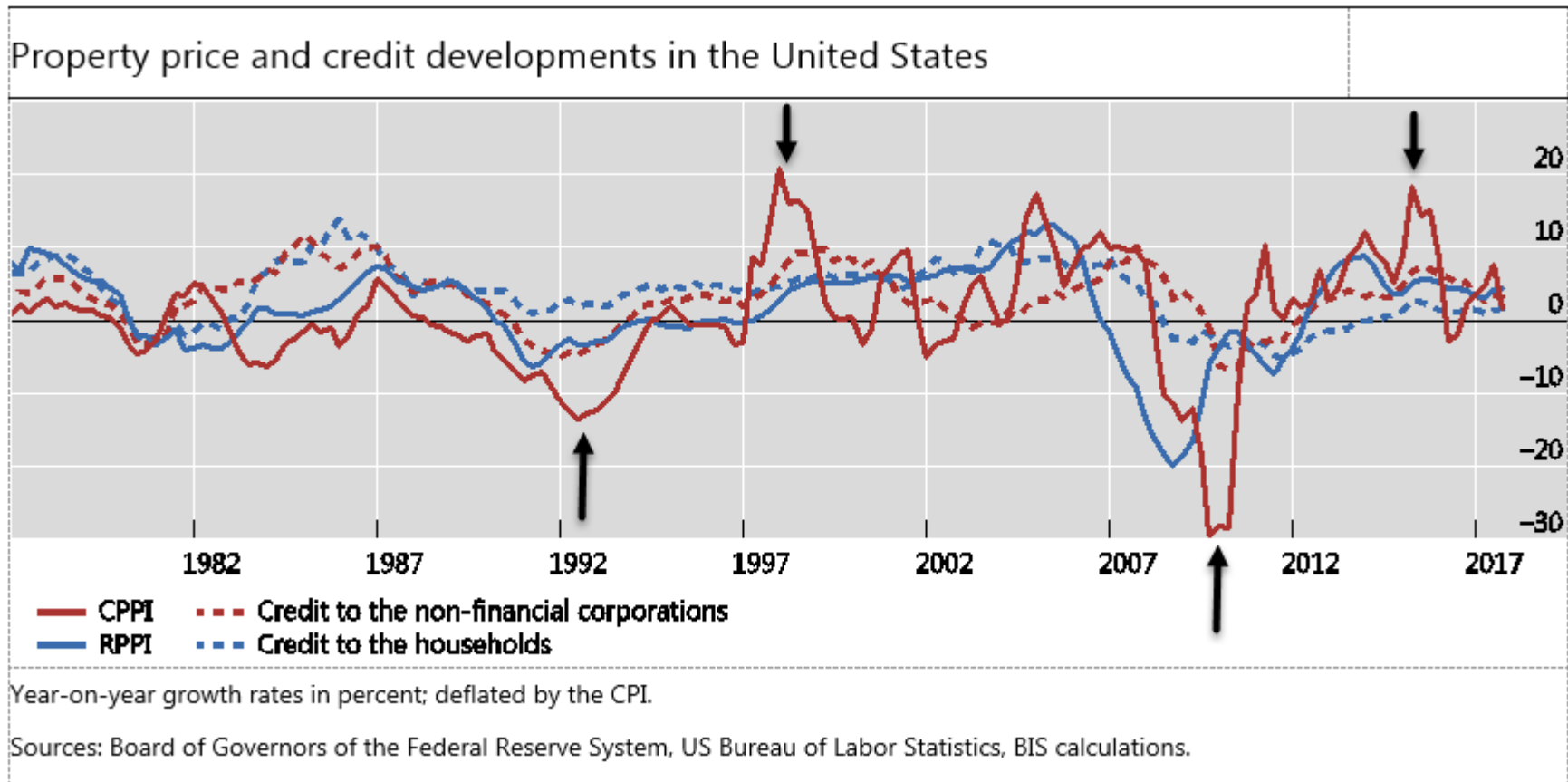
- Business investment highly **cyclical** (compared to household demand)
- Shorter **financing conditions** (maturity, leveraged finance)

- More **amplitude (volatility)**

- Rates of **depreciation** in bad times / rapid obsolescence of non-occupied assets
- **Bankruptcy** procedures (firms versus households)
- Fluctuations of **banks' exposures** (provisions / losses)



5. As always, let the data speak! The US example



CPPI more volatile than RPPI & property prices more volatile than credit in the US



Thank you!!



BIS CPPI statistics:

https://www.bis.org/statistics/pp_commercial.htm?m=6%7C288%7C646

bruno.tissot@bis.org

IFC.secretariat@bis.org

