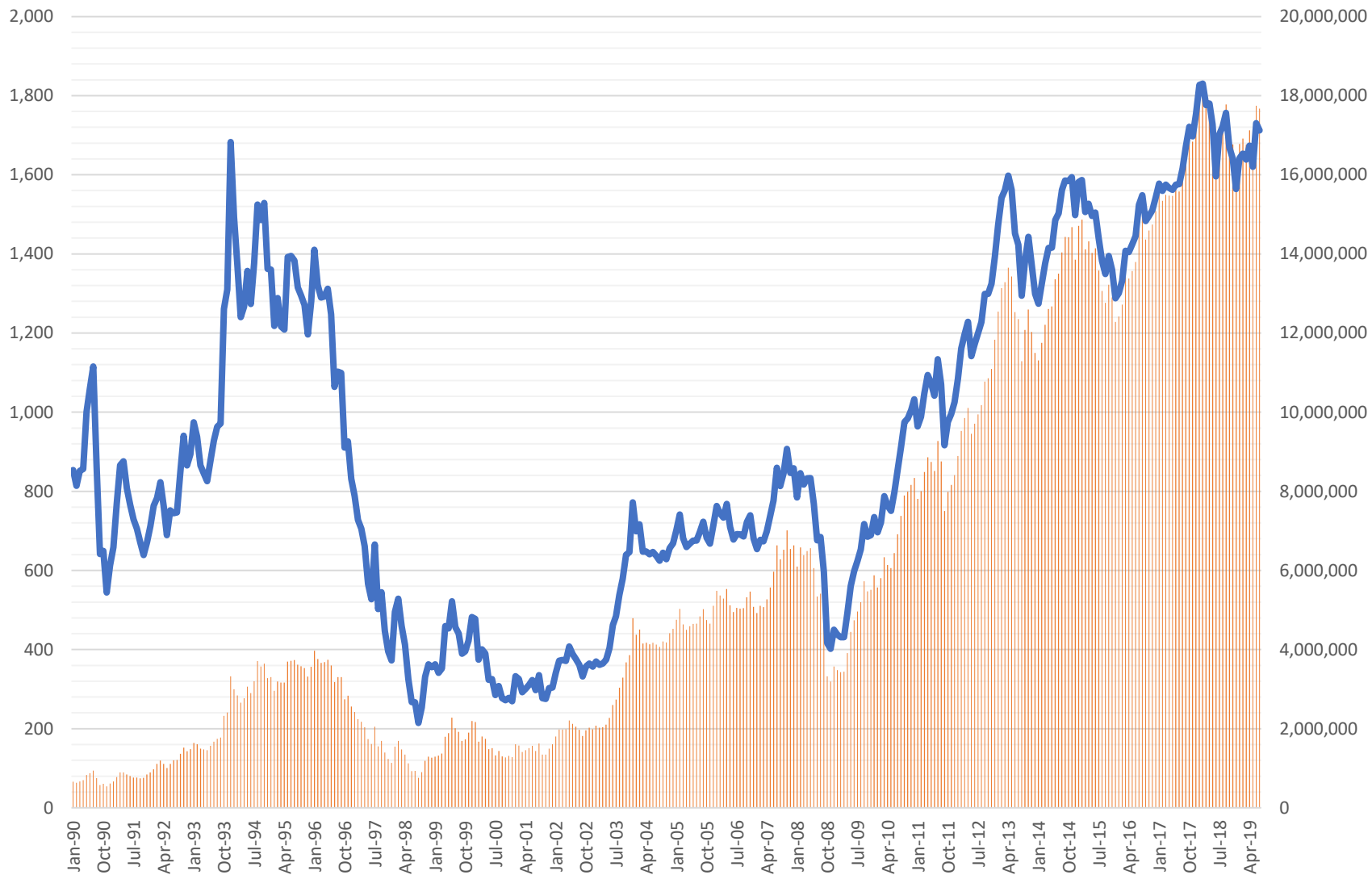


Pawin Siriprapanukul
(pawin@econ.tu.ac.th)

Office Hours: Tues,
Thurs 9.30 – 11.00 AM

EE 431: Economics of Financial Markets and Institutions

Mkt.Cap. SET Index

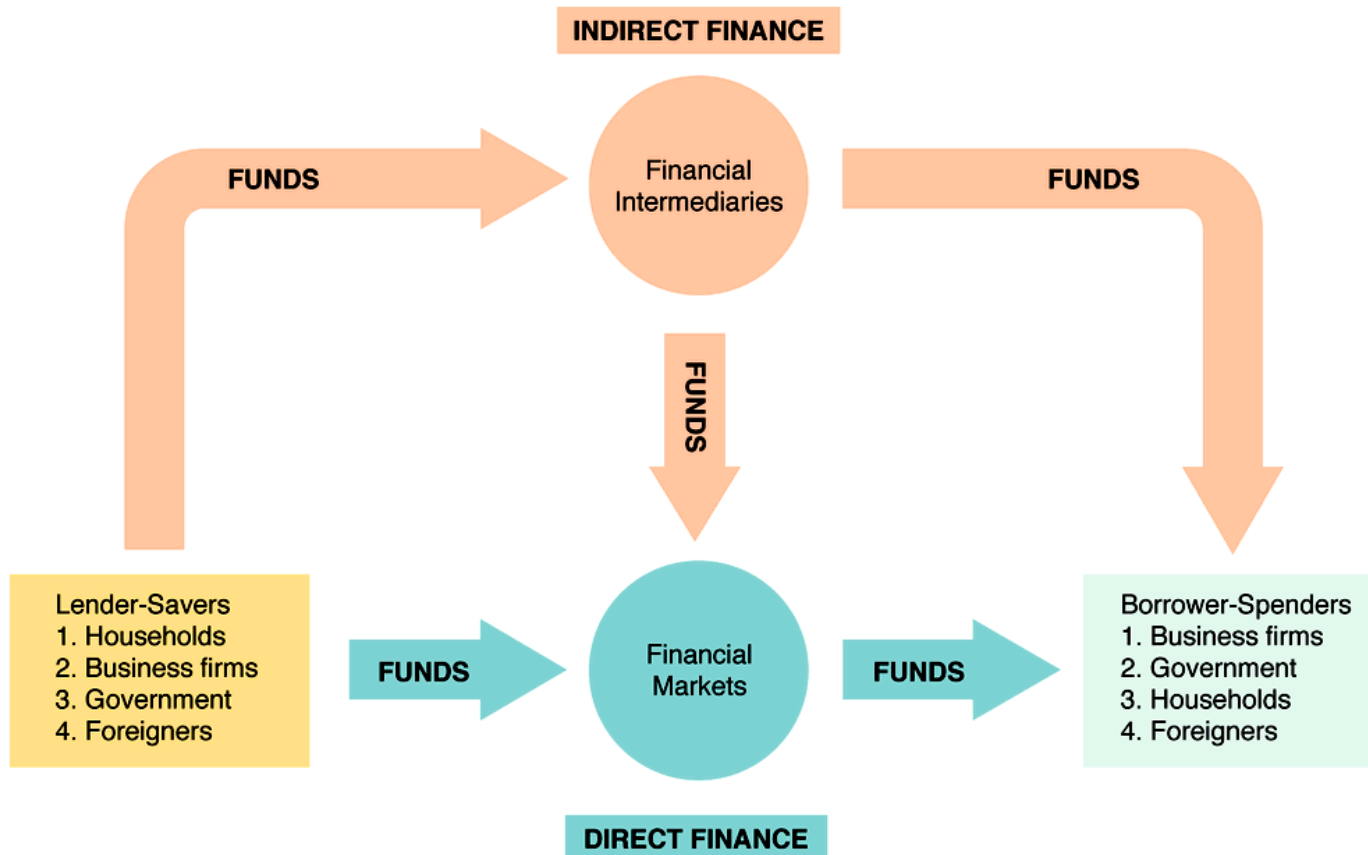


Course Description

Money and capital markets; Financial assets; Financial risks and financial risks bearing; Asset pricing; the CAPM and APT models; Interest rate structure; Bond and equity instruments; Financial derivatives; Asymmetric information in financial market; Financial institutions; Risk management of financial institutions; Monitoring and controlling of financial institutions; The deposit insurance system

Money and the Financial System

- We use money in our daily life.
- Why do we use money?
- We will see that money affects our lives in various aspects.
- We, economists, think that **financial system** transfers funds from people who have an excess of funds to people who have a shortage.
- This promotes economic efficiency as well.

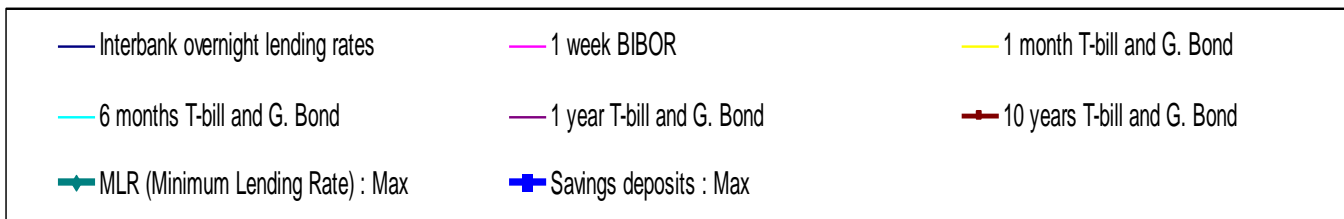
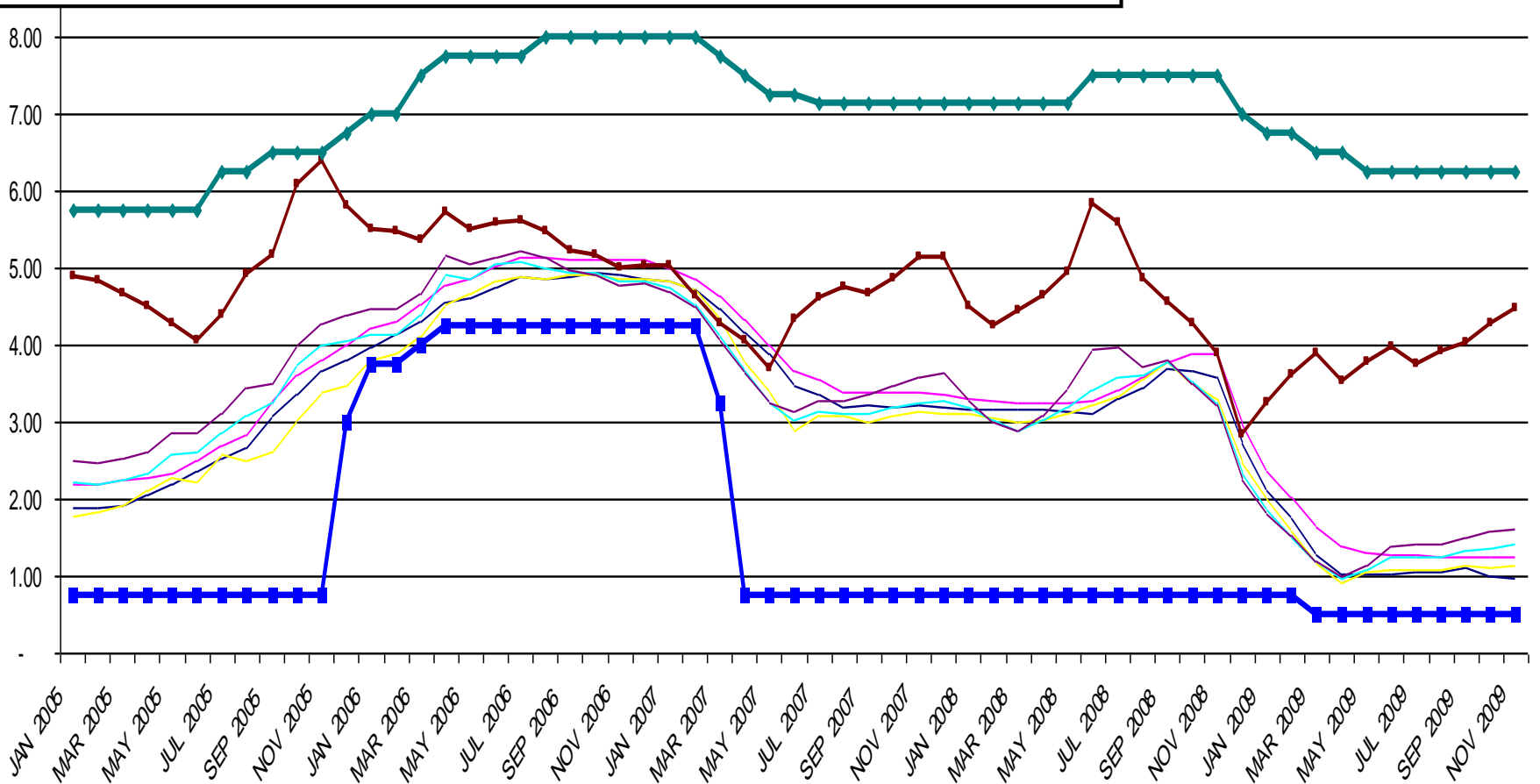


Financial Markets

- This is a main component of the financial system
- **Bond market**
- A *security* is a claim on the issuer's future income or assets
- A *bond* is a debt security that promises to make payments periodically for a specified period of time
- An *interest rate* is the cost of borrowing for the rental of funds.
- **Stock market**
- A *common stock* represents a share of ownership in a corporation. It is a security that claims on the earnings and assets of a corporation.

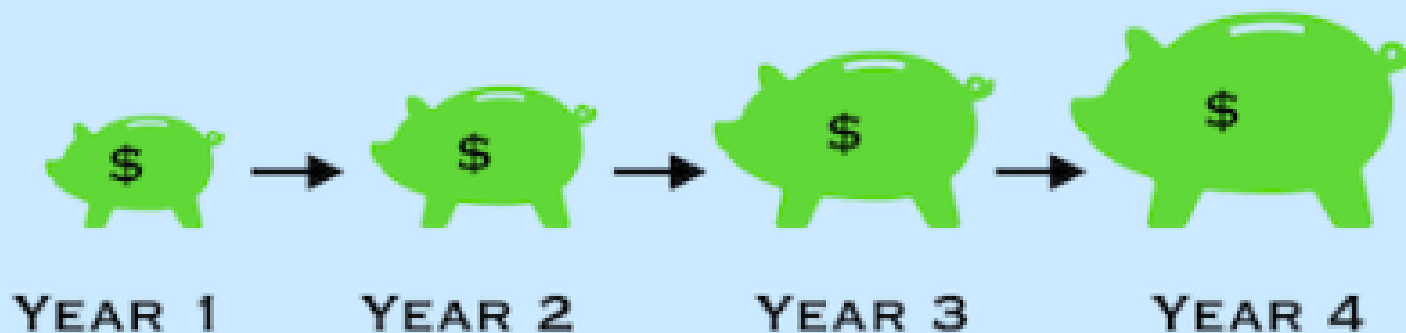
Source:

<http://www.bot.or.th/English/Statistics/FinancialMarkets/InterestRate/Pages/SatInterestRate.aspx>



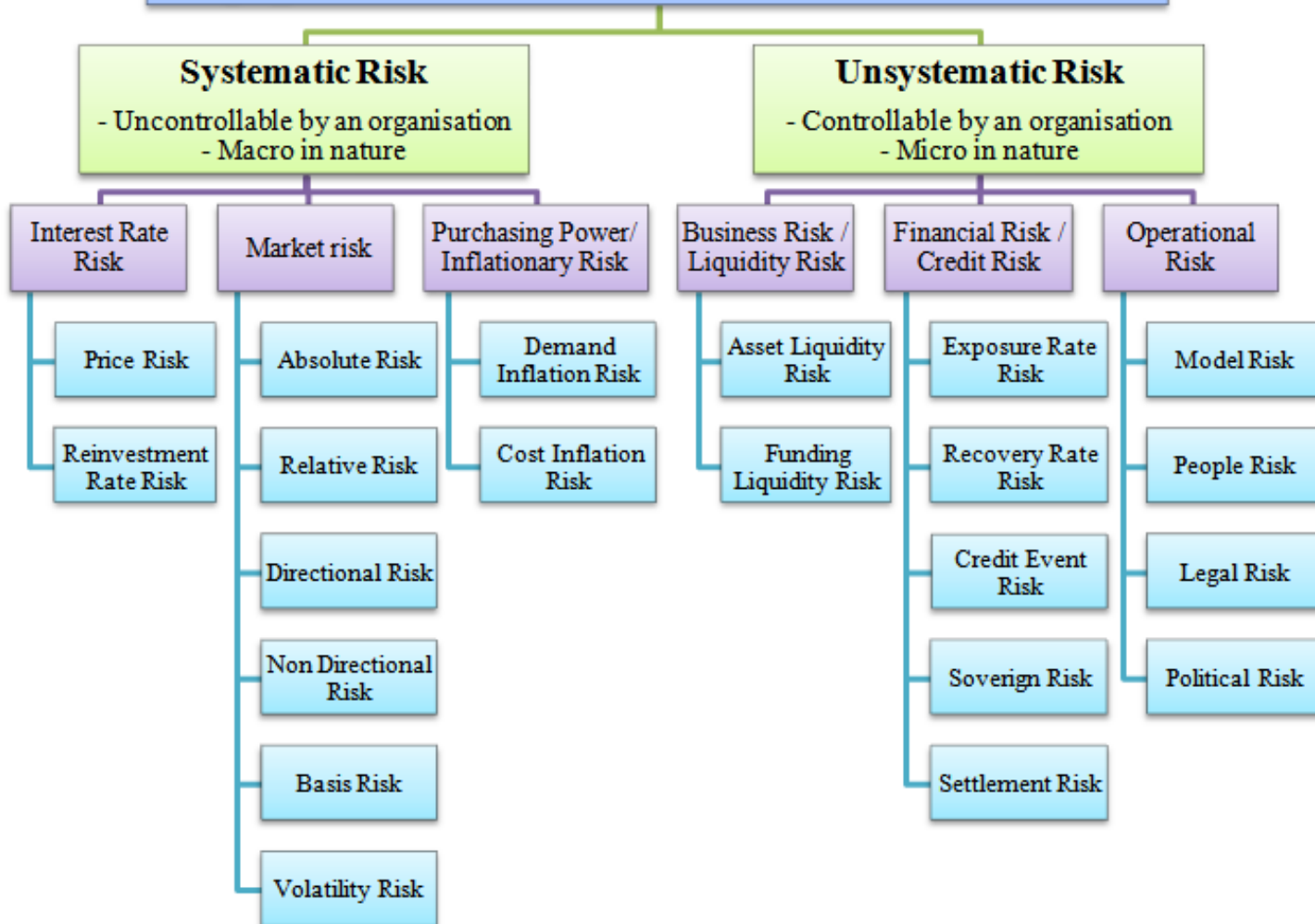
TIME VALUE OF MONEY

Money placed in deposit account earning interest



"I want payment today. Because if I wait, I lose out on the growth I would have earned."

Types of Risk in Finance



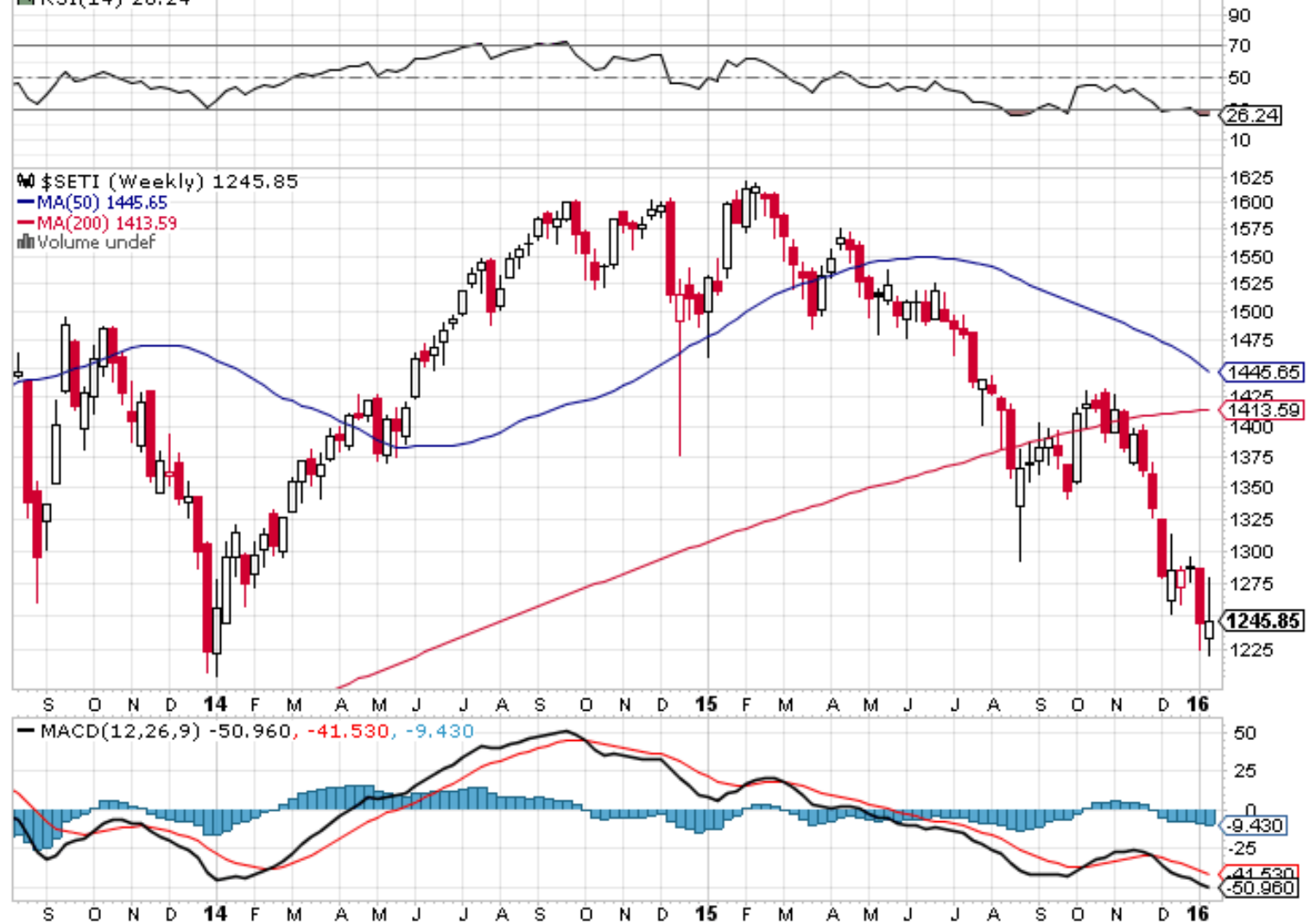
\$SETI Thailand Set Index (EOD) INDX

© StockCharts.com

15-Jan-2016

Open 1233.86 High 1279.21 Low 1220.96 Close 1245.85 Chg +1.67 (+0.13%) ▲

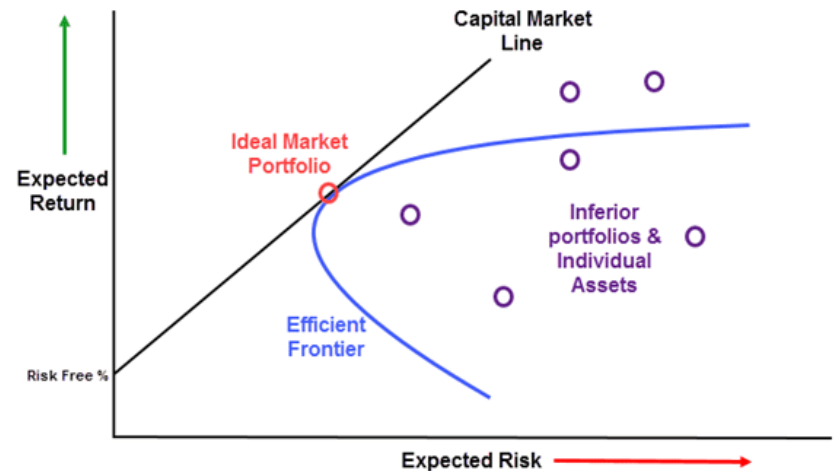
▲ RSI(14) 26.24



Mainstream Finance

Efficient Market Hypothesis:

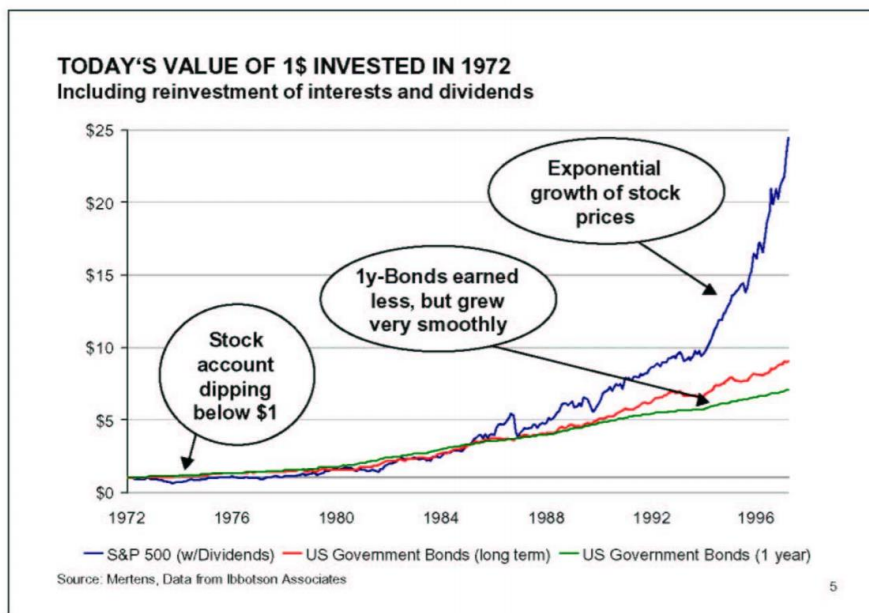
The Theory That Says Beating The Market Is Impossible



Anomaly #1

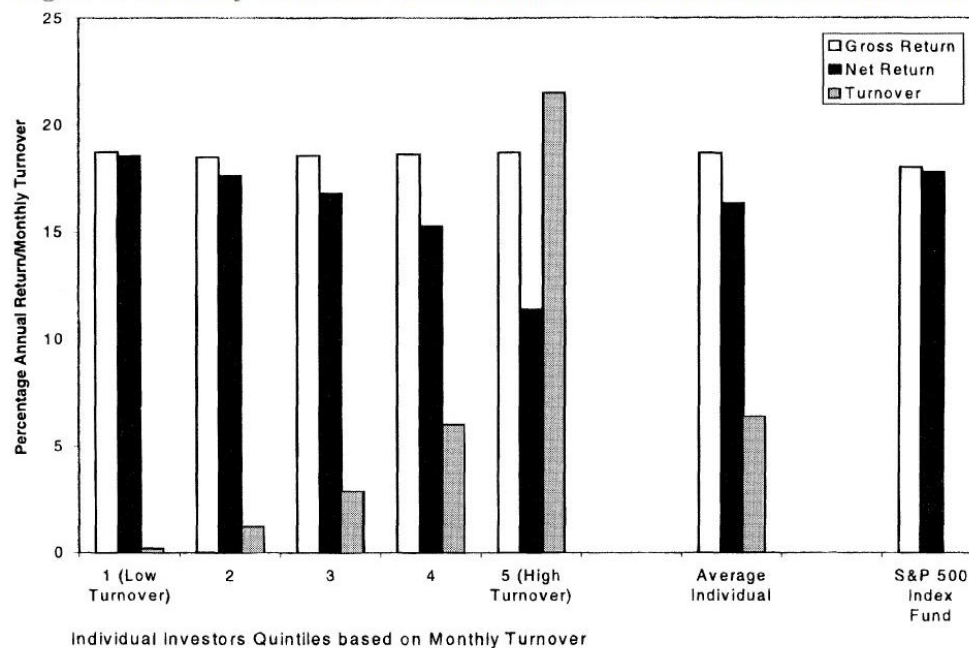


The long-term gains from the stock market have been astounding



Anomaly #2

Figure 1: Monthly Turnover and Annual Return of Individual Investors



Source: Barber and Odean (2000), Figure 1. The white bar (black bar) represents the gross (net) annualized geometric mean return for February 1991 through January 1997 for individual investor quintiles based on monthly turnover (grey bar). The net return on the S&P 500 Fund is that earned by the Vanguard Index 500.

Financial Institutions

- This is another main component of the financial system
- **Banks**
- *Banks* are financial institutions that accept deposits and make loans.
- They are the financial intermediaries that the average person interacts with most frequently.
- **Other financial institutions**
- These include, for example, insurance, finance companies, mutual funds, government financial intermediation, and investment banks.

Some Basic Facts



STOCKS ARE NOT
THE MOST
IMPORTANT
SOURCES OF
EXTERNAL
FINANCING FOR
BUSINESSES



ISSUING
MARKETABLE DEBT
AND EQUITY
SECURITIES IS NOT
THE PRIMARY WAY
IN WHICH
BUSINESSES
FINANCE THEIR
OPERATIONS

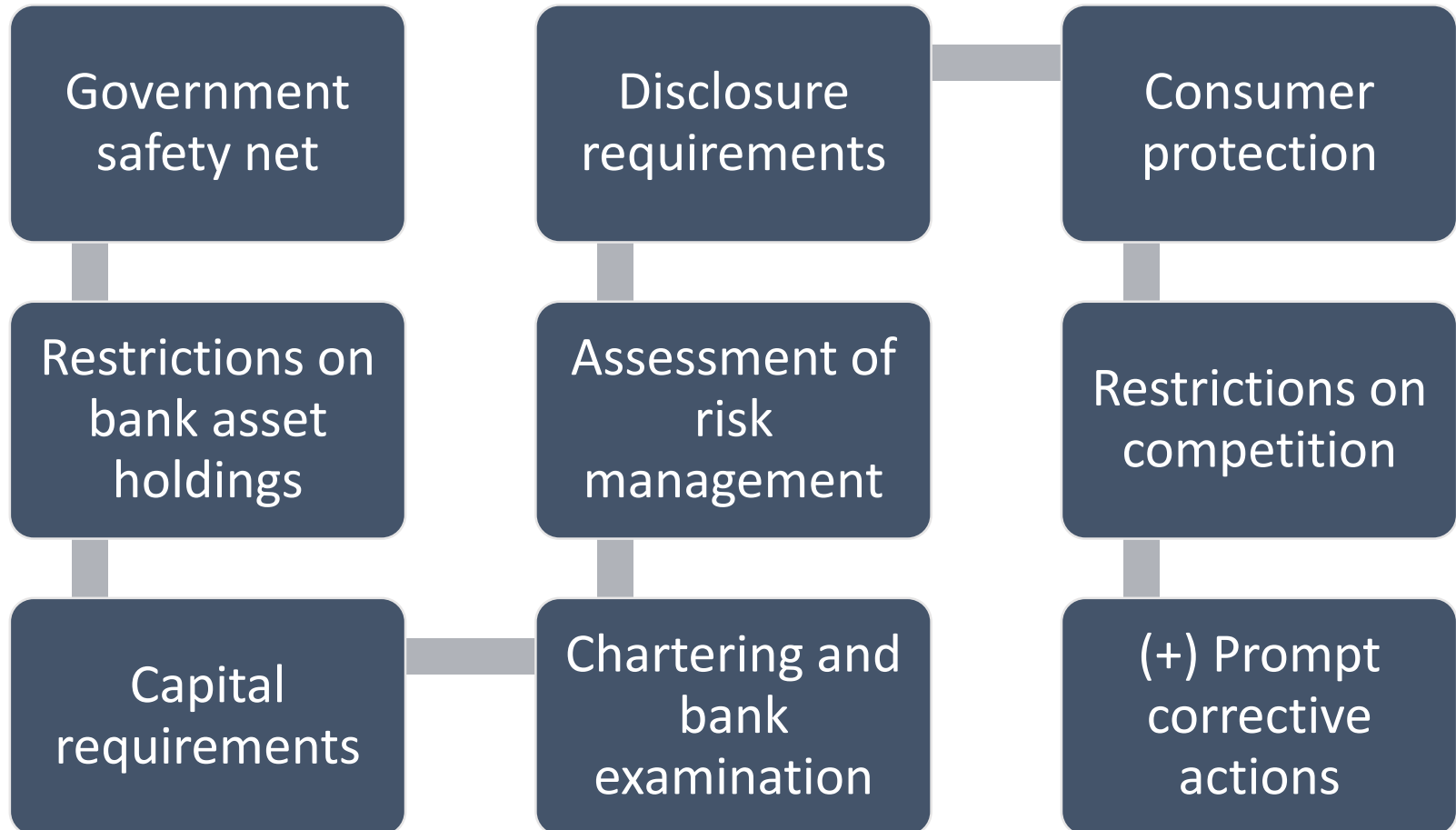


INDIRECT FINANCE
IS MANY TIMES
MORE IMPORTANT
THAN DIRECT
FINANCE



FINANCIAL
INTERMEDIARIES,
PARTICULARLY
BANKS, ARE THE
MOST IMPORTANT
SOURCE OF
EXTERNAL FUNDS
USED TO FINANCE
BUSINESSES.

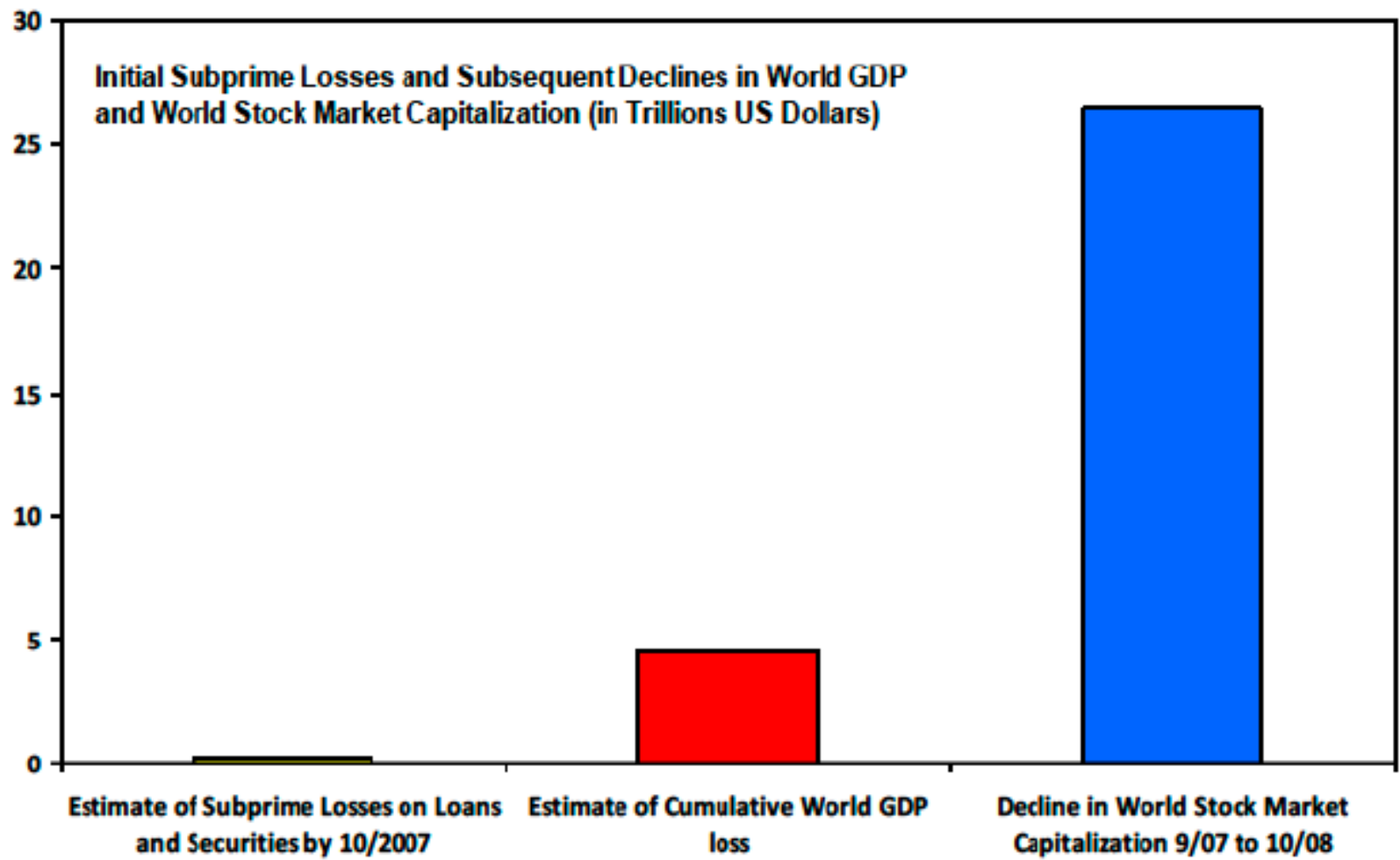
Financial institutions are heavily regulated



Financial Crisis

- Financial sector plays an important role to create or amplify many crises in the past.
- We, as economists, need to understand the relationship between financial sector and crises to solve or prevent the problems in the future.
- We will focus on the Sub-prime crisis.
- The sub-prime crisis leads to a big shift in the world of financial regulations.

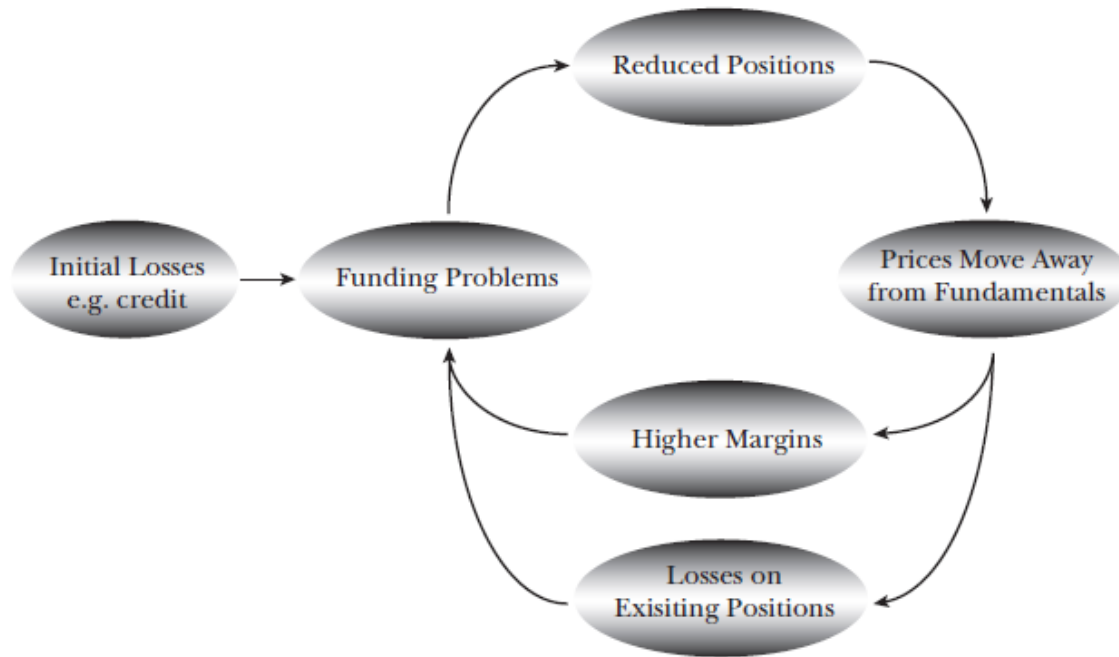
Figure 1. Initial Subprime Losses and Declines in World GDP and World Stock Market Capitalization



Source: IMF Global Financial Stability Report; World Economic Outlook November update and estimates; World Federation of Exchanges.

Figure 4

The Two Liquidity Spirals: Loss Spiral and Margin Spiral



Source: Brunnermeier and Pedersen (forthcoming).

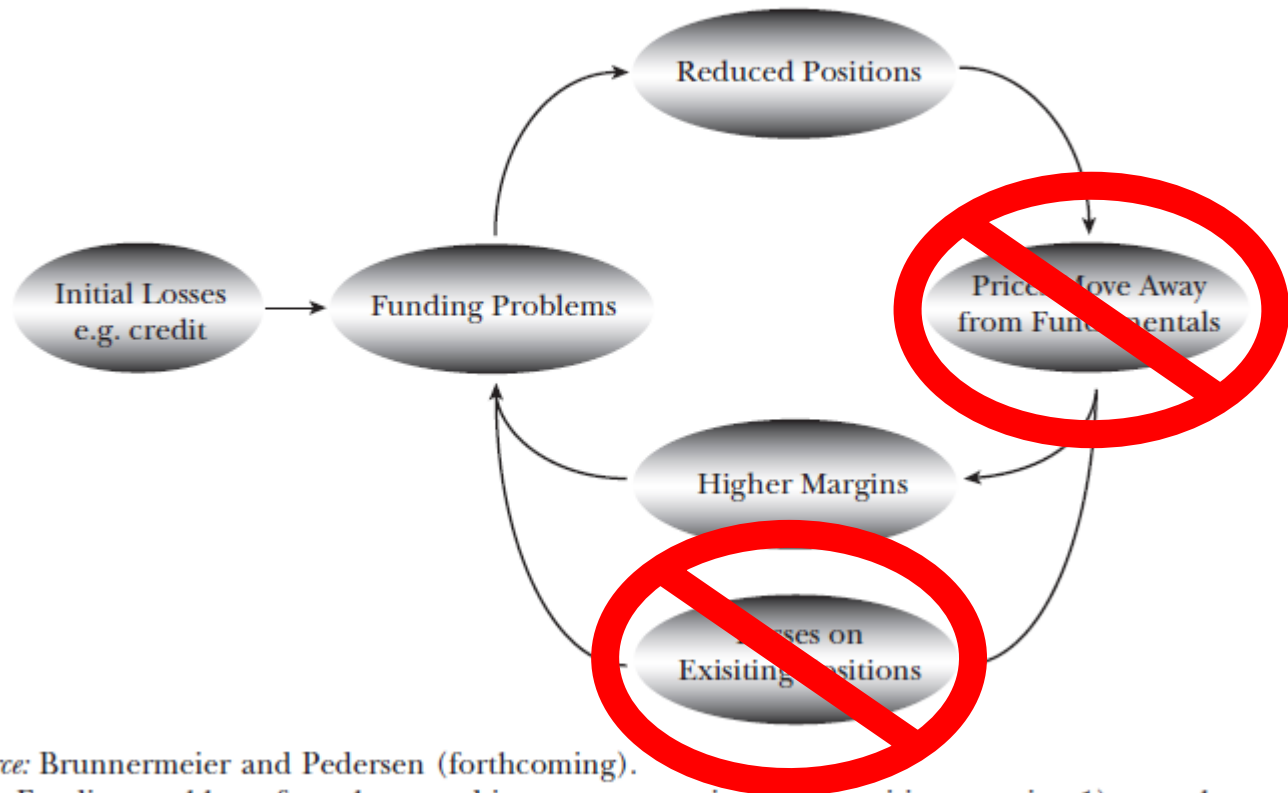
Note: Funding problems force leveraged investors to unwind their positions causing 1) more losses and 2) higher margins and haircuts, which in turn exacerbate the funding problems and so on.

New Financial Regulation (Idea)

- The crisis has involved a regulatory failure as much as anything else
- The current regulatory approach assumes that we can make the system safe by simply trying to make sure that individual banks are safe (micro-prudential regulation)
- In practice, it represents a fallacy of composition
- The current ***micro-prudential regulation*** should be supplemented by ***macro-prudential regulation***

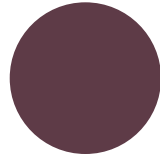
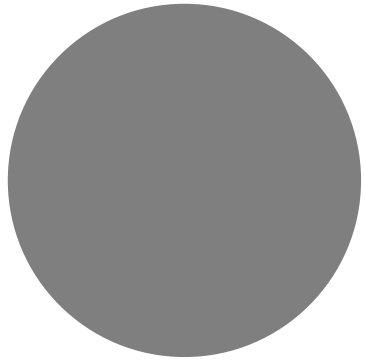
Figure 4

The Two Liquidity Spirals: Loss Spiral and Margin Spiral



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Note: Funding problems force leveraged investors to unwind their positions causing 1) more losses and 2) higher margins and haircuts, which in turn exacerbate the funding problems and so on.



However, we are in a
VUCA world ...





We Are Transforming Agriculture

We grow delicious, nutritious leafy greens and herbs without sunlight, soil, or pesticides. Our crops get the perfect amount of moisture and nutrients misted directly onto their roots in a completely controlled environment. With our patented technology, we take indoor vertical farming to a new level of precision and productivity with minimal environmental impact and virtually zero risk.



MODEL 3



Accelerating Sustainable Transport

Model 3 combines real world range, performance, safety and spaciousness into a premium sedan that only Tesla can build. Our most affordable car yet, Model 3 achieves 215 miles of range per charge while starting at only \$35,000 before incentives. Model 3 is designed to attain the highest safety ratings in every category.



215 miles
Range per charge



Under 6 seconds
Zero to 60 mph



Seating for 5 Adults



Designed to achieve 5-Star Safety Rating



Autopilot Hardware



Supercharging

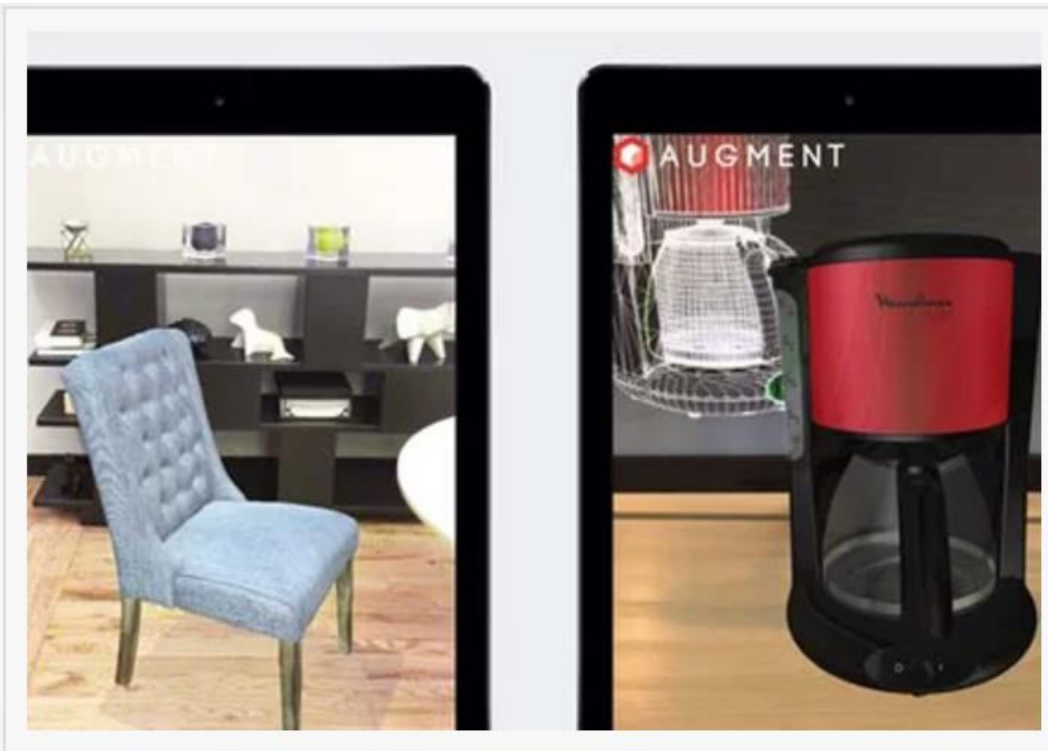
\$35,000

Starting price before incentives
Deliveries begin late 2017

Google Home enables users to speak voice commands to interact with services through the Home's [intelligent personal assistant](#) called [Google Assistant](#). A large number of services, both in-house and third-party, are integrated, allowing users to listen to music, look at videos or photos, or receive news updates entirely by voice. Google Home also has integrated support for [home automation](#) features, letting users speak commands to the device to control smart home appliances.



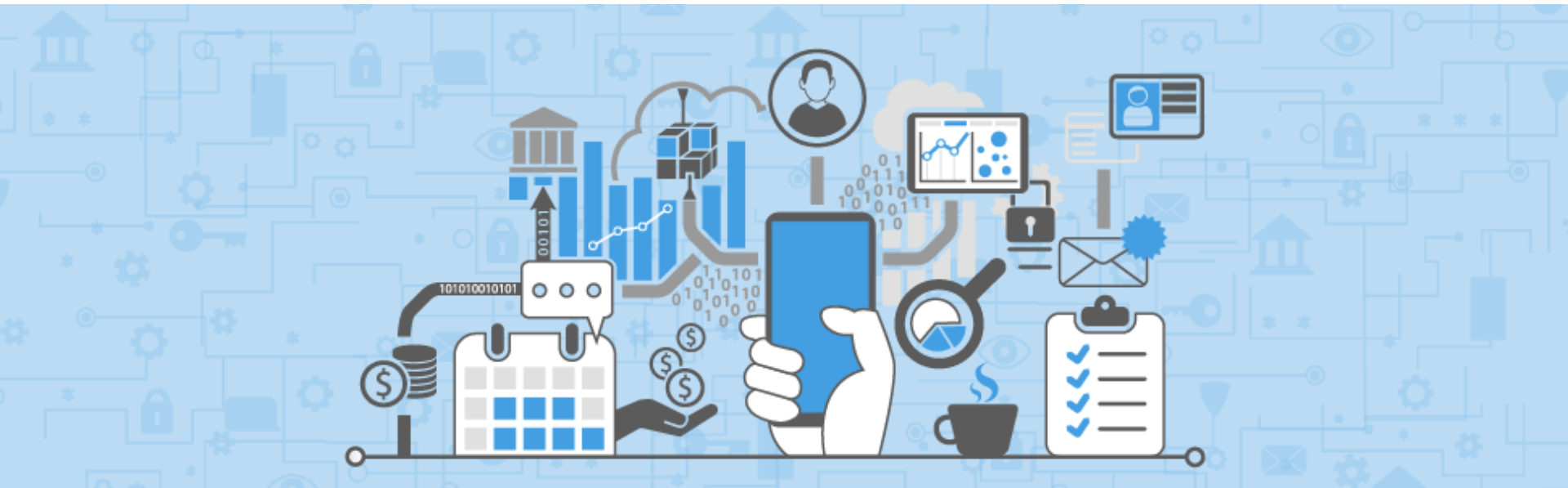
Augmented reality (AR) , is a live direct or indirect view of a physical, real-world environment whose elements are *augmented* by computer-generated sensory input such as sound, video, graphics or [GPS](#) data. It is related to a more general concept called [computer-mediated reality](#), in which a view of reality is modified (possibly even diminished rather than augmented) by a computer. Augmented reality enhances one's current perception of reality, whereas in contrast, [virtual reality](#) replaces the real world with a simulated one.



Augment (Android, iOS: Free)

Augment ([Android](#), [iOS](#)) lets you place a wide range of virtual objects into your environment, with options to move, resize, capture and share them from within the app. Users can choose from a variety of existing models in the database, scan objects from QR codes or import any created in external 3D modeling programs. Premium accounts on Augment's platform get access to a host of corporate-friendly features for making sure your product reaches its intended audience.

In the financial world ...



K PLUS Features



Transfer

Transfer money via mobile phone number or QR Code



Top-up

Topup mobile phone/Easy Pass



Payment

Pay bills via barcode



Mutual Fund

Buy/Sell Mutual Fund



PromptPay

Send or receive money via PromptPay



History

View transaction history



Favorites

Manage your favorite transaction



MyPort

See asset overview



Life PLUS

Expenses records



Services

Apply other services



mPOS – mobile Point of Sale Digio mPOS transforms your smart device into a secured credit card acceptance terminal. You can accept VISA and Master Cards using your existing smart phone or tablet. It is as easy as inserting a credit card into the mPOS reader, signing on the device screen and receiving an e-Receipt.

How PeerPower works

We're not a bank; We connect business owners with investors through a trusted platform.



Borrower

Uses loans for business purposes; working capital, expansion, refinancing; and repays loans



PeerPower

Screens borrowers through credit scoring and offers a loan quote



Investor

Earns monthly cashflows and diversifies your investment portfolio

Send money to Thailand

Create a free account today and start saving on your money transfers.

Class talks

- Students should arrange into 8 groups.
- There will be **two** talks on issues related to JEP articles and content in class.
- At each talk, each group summarizes related JEP articles, **one** page for **each** article, and submit to the lecturer.
- At each talk, each group present your own idea about the topic of the talk with Powerpoint (or something similar) not exceeding **three** pages. The presentation can cover anything related to the topic.
- At each talk, **four** groups will be selected to present their own idea about the topic of the talk.
- After that, class will discuss about current development and what will happen in the future.

Readings

- *Main textbook:*
- [Mishkin] Mishkin, F.S. **The Economics of Money, Banking, and Financial Markets**. Pearson/Addison Wesley.
- [A&D] Ackert, L. and R. Deaves (2010) **Behavioral Finance: Psychology, Decision-Making, and Markets**. South-Western Cengage Learning.
- [Brunnermeier et al.] Brunnermeier, M., A. Crocket, C. Goodhart, A.D. Persaud, and H. Shin (2009). The Fundamental Principles of Financial Regulation. **Geneva Reports on World Economy** 11. Parts 1 – 4.

- *Required Readings:*
- [Siegel&Thaler] Siegel, J.J. and R.H. Thaler (1997). Anomalies: the equity premium puzzle. **Journal of Economic Perspectives** 11(1), pp. 191 – 200.
- [Daniel&Hirshleifer] Daniel, K. and D. Hirshleifer (2015). Overconfident investors, predictable returns, and excessive trading. **Journal of Economic Perspectives** 29(4), pp. 61 – 88.
- [Brunnermeier, 2009] Brunnermeier, M. (2009). Deciphering the liquidity and credit crunch 2007 - 2008. **Journal of Economic Perspectives** 23(1), pp. 77 - 100.
- [Aikman et al.] Aikman, D., J. Bridges, A. Kashyap, and C. Siegert (2019). Would macroprudential regulation have prevented the last crisis? **Journal of Economic Perspectives** 33(1), pp. 107 – 130.

Evaluation

- Class talks 25%
- Midterm examination 30%
- Final examination 45%