DER WANDEL GEHT WEITER ...  
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1. “Technological change”

Disruptive technologies:
- Netflix vs. Blockbusters
- Skype vs. phone
- Amazon and Walmart.com

Smooth tech-progress:
- “Tech-monopolists” acquire start-up innovators
  (US pharmaceutical model)

FinTech:
- End of cross-subsidization
- Unbundling
  (end of universal bank model?)
- Inclusion
  - Less trust/collateral need
1. "Technological change"

- Netflix vs. Blockbusters
- Skype vs. phone
- Amazon and Walmart.com

**Disruptive technologies**

- Creative destruction
- Firm-specific risk is high
- Delay investment < savings (precautionary)
- Cash hoarding

**Smooth tech-progress**

- “Tech-monopolists” acquire start-up innovators (US pharmaceutical model)
- Cash savings for acquisitions
Corporate cash savings

Not consistent with demographic reasoning

- Peter Chen, Loukas Karabarbounis, Brent Neiman, The Global Rise of Corporate Saving (2017), NBER WP# 23133
- Peter Chen, Loukas Karabarbounis, Brent Neiman, 
The Global Rise of Corporate Saving (2017), NBER WP# 23133
Return implications

Risk Free Rate (low)

Range of existing r-star estimates

- Williams (2017) BEAP discussion

Risk-premium (high)

Equity risk premium

- Caballero et al. (2017)
Return implications

Risk Free Rate (low)

Risk-premium (high)

Equity risk premium

Implications for monetary policy, safe asset supply & investment advice
Why is productivity so low, despite of all this innovation?

- It first has to go down before it goes up

Example:
Investments in driverless car technology
no productivity increase YET!
2. Political uncertainty

- Global financial architecture: IMF/Worldbank was “designed/led” by US & UK
  - US: Trump, UK: Brexit
  - US/UK step back on global leadership
  - Who will step in?

- China:
  - Capital account and exchange rate regime
  - Increasing debt level

- Europe:
2. US Political Uncertainty

Political Uncertainty (high)

VIX (low)
2. Europe – risks now more contained

- Redenomination risk (exit risk) + “Reformstau” will be removed
  - France E. Macron

- Financial/banking risk
  - Italy individual banks
    - equity issuance by Unit Credit

- Geopolitical risk
  - Ukraine/Russia
  - Syria/Turkey
  - North Africa (population explosion)
    - migration
2. Europe: Different economic philosophies

“French”

“actively manage current crisis”

“German”

“creates precedence/future crisis”
2. Europe: Different economic philosophies

1. Discretion & straitjacket commitment
   "manage current crisis"
   
2. Solidarity
   Risk sharing
   Eurobonds/safe asset
   
3. Liquidity
   
4. Keynesian Stimulus
   switched sides after WWII

"French"

"German"

Rules & safety valves
"creates precedence/future crisis"

Liability Principle
No transfer union/bailouts
No joint liability

Solvency
Austerity/Reform
2. Europe: Different economic philosophies

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Solvency

Austerity/Reform
Safe Asset: ESBies/ SBBS (sovereign bond backed securities)

- Flight to safety
- Eliminated
- Re-channeled across two European bonds
- Euro-nomics Group (2011)

No Joint liability
No Eurobond!

• Euro-nomics Group (2011)
Safe Asset: ESBies/SBBS (sovereign bond backed securities)

- Diabolic loop
  - Sovereign-Banking Nexus

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Pooling

s

sovereign bonds

ESBies

Junior Bond

Tranching

No Joint liability

No Eurobond!

• Euro-nomics Group (2011)
### Overall European Stability Framework

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<thead>
<tr>
<th>Spread</th>
<th>Friction</th>
<th>Instrument</th>
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<tr>
<td>Flight to safety Diabolic loop</td>
<td>Safety risk premium</td>
<td>ESBies/SBBS</td>
</tr>
<tr>
<td>Liquidity problem due to (self-fulfilling) multiplicity</td>
<td>Default risk premium</td>
<td>ECB Lender of last resort</td>
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<tr>
<td>Liquidity problem due to lack of commitment</td>
<td></td>
<td>ESM conditionality + ECB’s OMT</td>
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<td>Solvency problem</td>
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<td>Restructuring</td>
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<tr>
<td>Exit risk</td>
<td>Expected default</td>
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<tr>
<td></td>
<td>Redenomination risk premium</td>
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- Risk premium for endogenous (self-generated) risks are **socially wasteful**
  - Total risk can be reduces

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Conclusion

- Technological change/uncertainty (disruptive vs. smooth progress)
  - Cash hoarding: low risk-free rate
  - Investment < savings: high risk premia

- Political uncertainty
  - Global
  - US: political uncertainty... but low VIX

- Europe: Different economic philosophies
  - Challenge: Finding “good compromises” – ESBies/SBBS

Monetary policy implications
Investment advice