

# RIETI-CEPR Symposium

## Brexit:

## On the future of the UK and the global economy

### Handout



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<http://www.rieti.go.jp/en/index.html>

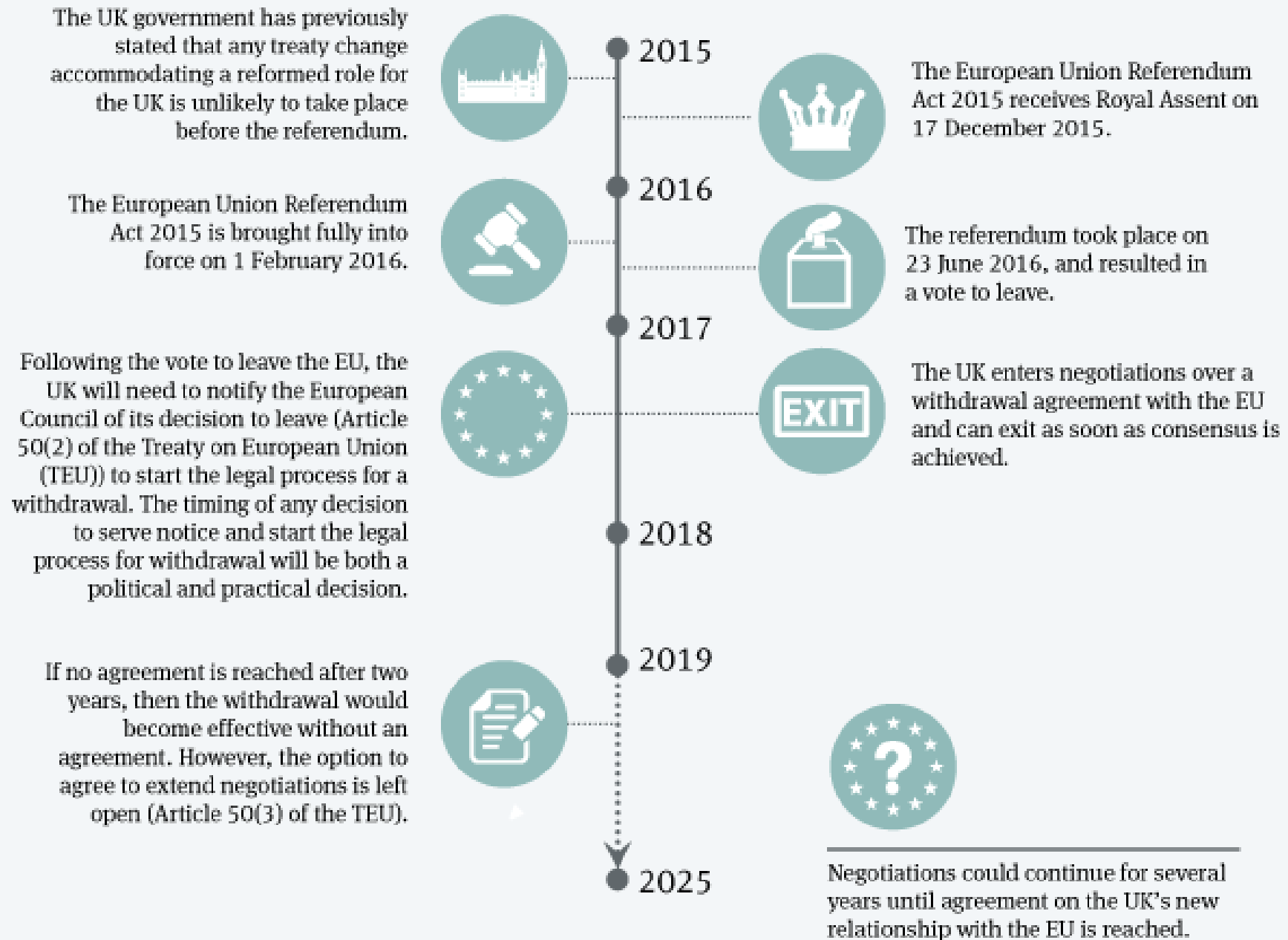


# Brexit, International Finance, and the City

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# Brexit: A Timeline

(Source: Norton Rose Fulbright)



# Some Possible Outcomes

(Source: Global Counsel)

- Norwegian-Style EEA Arrangement:
  - Full access to single market, but adoption of EU standards, regulations, and free movement, plus a big contribution.
- Turkish-style Customs Union:
  - Sector coverage is incomplete, EU external tariffs implemented, no guaranteed access to third market.
- FTA Approach:
  - UK and EU enter an FTA, FTAs possible with other countries. Time to negotiate long and uncertain.
- Swiss-style Bilateral Accords:
  - UK follows regulation in the covered sectors, negotiates FTAs separately. Concerns in Brussels about cherry picking, especially with passporting.
- MFN Approach:
  - Face common external tariff with EU, damages trade with EU.

# Brexit and the City

Source: The City UK

- UK Financial and Related Professional Services (FRPS) accounts for roughly 12% of UK GDP, employs ~2.2 million people.
- Generates the UK's largest industry-specific trade surplus (~4% of output).
- Country's biggest source of inward investment.
- Generates 11% of aggregate UK tax revenue.
- Output per FRPS worker is £87,000, compared to £52,000 on average for other UK industries.
- Range of services, finance, but also accounting, legal, consulting.

# UK's Share of Global Financial Services Market

## Particular Dominance in FX and Rates

Source: The City UK

Share of the global market, %

|                | Investment Banking (IBD)                   |   |   | FICC                                       |                            | Equities                    |
|----------------|--|---|---|--|----------------------------|-----------------------------|
|                | Equity Capital Markets (EC M) <sup>1</sup> | Mergers & acquisitions (M&A) <sup>2</sup> | Debt Capital Markets (DCM) <sup>1</sup> | Foreign exchange (FX) trading <sup>3</sup> | Rates trading <sup>4</sup> | Equity trading <sup>5</sup> |
| US             | 39   | 49  | 40                                      | 19   | 23                         | 52                          |
| <b>UK</b>      | 7  | 5   | 15                                      | 41   | 49                         | 6                           |
| Germany        | 2  | 3   | 4                                       | 2  | 4                          | 2                           |
| France         | 1  | 4   | 4                                       | 3  | 7                          | 2                           |
| Japan          | 3  | 2   | 0                                       | 6  | 2                          | 7                           |
| Singapore      | 2  | 1   | 2                                       | 6  | 1                          | <1                          |
| Hong Kong (HK) | 30   | 1   | 4                                       | 4  | 1                          | 2                           |
| China (ex HK)  | n/a <sup>6</sup>                           | 4   | 1                                       | 1  | <1                         | 15                          |
| Others         | Netherlands (4%)                           | Canada (6%)                               | Canada (5%)                             |  |                            |                             |

- 41% of OTC global forex turnover
- 49% of OTC global single currency interest rate derivatives turnover

# UK's Share of Global Financial Services Market

## Particular Dominance in FX and Rates

Source: The City UK

Share of the global market, %

|                | Corp. Banking  | Investment Management  |                               |                             |                          | Insurance                     |                                     |
|----------------|--|--|-------------------------------|-----------------------------|--------------------------|-------------------------------|-------------------------------------|
|                | Cross-border lending <sup>1</sup>                      | Offshore wealth management <sup>2</sup>  | Asset management <sup>3</sup> | Private equity <sup>4</sup> | Hedge funds <sup>5</sup> | Marine Insurance <sup>6</sup> | Reinsurance <sup>7</sup>            |
| US             | 18   | 7  | 57                            | 66                          | 67                       | 6                             | 17                                  |
| <b>UK</b>      | 20   | 11   | 6                             | 9                           | 10                       | 29                            | 16                                  |
| Germany        | 4  | n/a  | 3                             | 1                           | 1                        | 4                             | 24                                  |
| France         | 7  | n/a  | 3                             | 3                           | <1                       | 3                             | 2                                   |
| Japan          | 3  | n/a  | 5                             | 1                           | 5                        | 7                             | 4                                   |
| Singapore      | 3  | 10   | <1                            | 3                           | 1                        | 1                             | 2                                   |
| Hong Kong (HK) | 5  | 5  | 1                             | 4                           | 2                        | 1                             | <1                                  |
| China (ex HK)  | n/a <sup>6</sup>                                       | n/a  | 3                             | 3                           | <1                       | 8                             | 3                                   |
| Others         | Cayman Isl. (7%),<br>Switzerland (6%),<br>Ireland (5%) | Switzerland (25%),<br>Caribbean &<br>Panama (13%),<br>Channel Islands<br>& Ireland (13%) |                               |                             | Switzerland (4%)         |                               | Bermuda (14%),<br>Switzerland (14%) |

- 20% of global cross-border liabilities.
- High percentage of gross global insurance/reinsurance premiums.

# Business in which UK Leads are Policy Sensitive

(Armstrong (2016))

- UK leads the world in FX trading, rates trading, cross-border lending, and insurance.
- Important reliance of these businesses on **payment** and **clearing** systems.
- **Payments** system for the Eurozone is known as TARGET2.
  - Hub and spoke structure, with the ECB as the hub, and National Central Banks (NCBs) as the spokes.
  - Euro-denominated finance needs to be cleared and settled every day, so access to a reliable payments system is critical.
  - UK banks directly participate in TARGET2, though Bank of England does not.
    - E.g., Lloyds uses a euro reserves account with the Dutch Central bank, which provides finance against collateral.
  - What happens to this arrangement if the UK leaves the European Economic Area?



# The Payments Issue

(Armstrong (2016))

- If the UK leaves the EEA, UK banks would need to either operate through subsidiaries or branches located within the EEA. (Otherwise, clear financial stability implications for payment “plumbing” system in Europe).
- Clearly raises costs of operation for UK banks.
- Also makes it less attractive as a destination for non-EU banking institutions to establish EU headquarters in the UK.
- Uncertainty around regulation/regulatory equivalence/ passporting means that this is likely to be a major issue.
- We will return to the general topic of uncertainty a little later as well.

# The Settlement Issue

## (Armstrong (2016))

- A central counterparty (CCP) clearing mechanism generates efficiencies in netting and collateral management relative to a distributed net of counterparties (Duffie and Zhu, 2011).
- Over a half of all interest rate derivatives, and over a third of all credit derivatives are traded in the UK on CCPs.
  - Value of pre-placed margin and default funds at BoE was £91 BN in 2015.
- But the greater the trade on CCPs, the more they become systemically important (SIFIs)
  - They generally have access to discount window facilities in the UK, and TARGET2 in the Eurozone.

# The Settlement Issue

## (Armstrong (2016))

- CCPs as SIFIs led the ECB to posit the policy that if CCPs require Euro liquidity, and have more than €5 BN per day net credit exposure per main product, they should be located within the Eurosystem.
- Successfully challenged by UK in European Court of Justice.
- Resolution: BoE and ECB agreed on joint supervision and oversight of CCPs, and agreed **reciprocal currency swaps** in case multi-currency liquidity support needed by CCPs.
- David Cameron negotiated a “no-discrimination” for no-Eurozone country clause in the European Council in 2016.
- Important question: post-Brexit, the UK is no longer a shareholder of the ECB; doesn't have access to the ECJ; no-discrimination clause shouldn't apply.
- Will EU renew no-discrimination arrangement and swap arrangements for CCPs? **Slim incentives to do this given huge size of Euro currency markets in the UK – policy also potentially time-inconsistent.**

# Solution: Go Overseas? India/China?

## A Challenge at a Challenging Time

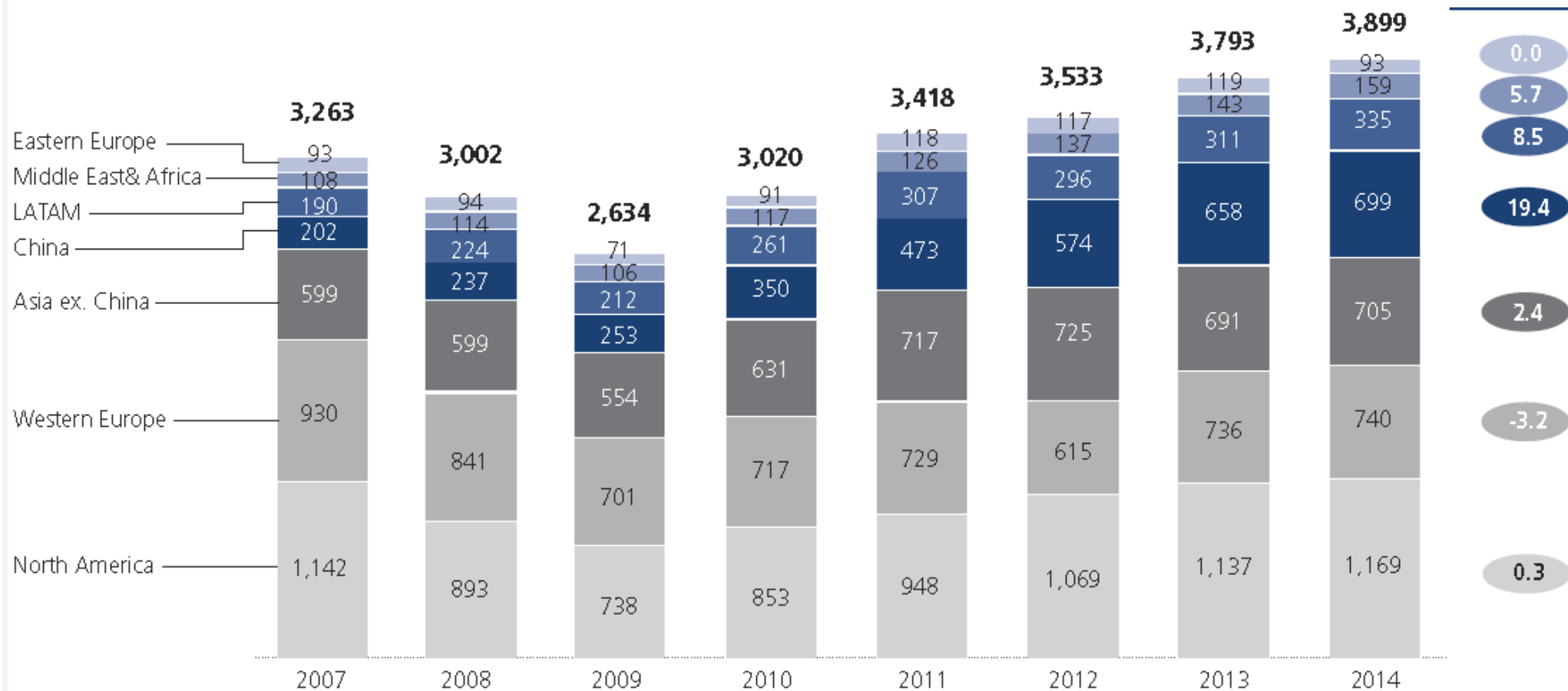
- UK banking sector's return on equity (RoE) has fallen from 25% in 2006 to under 9% in 2015.
- Insurance sector faces challenges due to implementation of Solvency II regulations.
- Risk mitigation and reductions in risk-weighted assets have been ongoing since the onset of the crisis.
- UK banks collectively divested USD 138 billion in international assets between 2007 and 2015, meaning they were less outward-looking pre-Brexit.
  - Barclays shutting operations in Asia, Russia, and Brazil.
  - HSBC shutting down private banking unit in India.
  - RBS exiting market businesses in EMEA.

# Financial Services Steadily Shift Towards Asia

Global retail banking, wholesale banking and asset management revenues

Bank divestitures 2007-15, USD billions

CAGR,  
% (2007-2014)



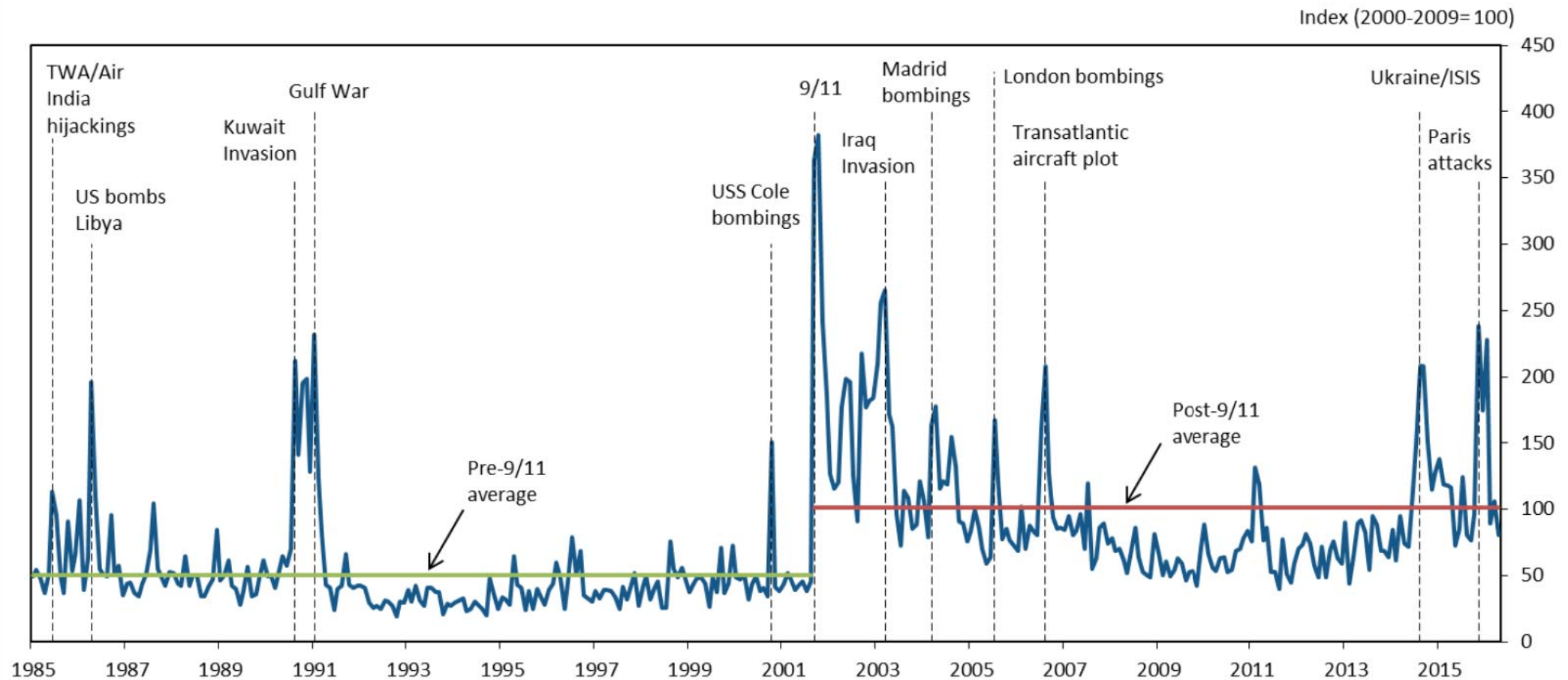
# Pivot to Asia

- Negotiating entry for UK financial services into Asian capital markets will be important.
- China and India currently import US\$ 26 BN and US\$ 11.5 BN in financial services, respectively.
- The recent issuance of HDFC “masala” bonds and Chinese government RMB bonds in London are both good developments.
- But more will need to be done, and there are clearly risks:
  - India still caps FDI in pensions and insurance at 49% (though private bank limit is now 74%).
  - Financial services FDI is particularly sensitive in many countries.
  - Negotiating trade deals is a notoriously slow process, so difficult to forecast how easy this will be.
- Role of uncertainty in all of these negotiations is also a big issue.

# The Role of Uncertainty: Geopolitical

## Carney (2016)

**Chart 1: Geopolitical risk doubled, on average, after 9/11**

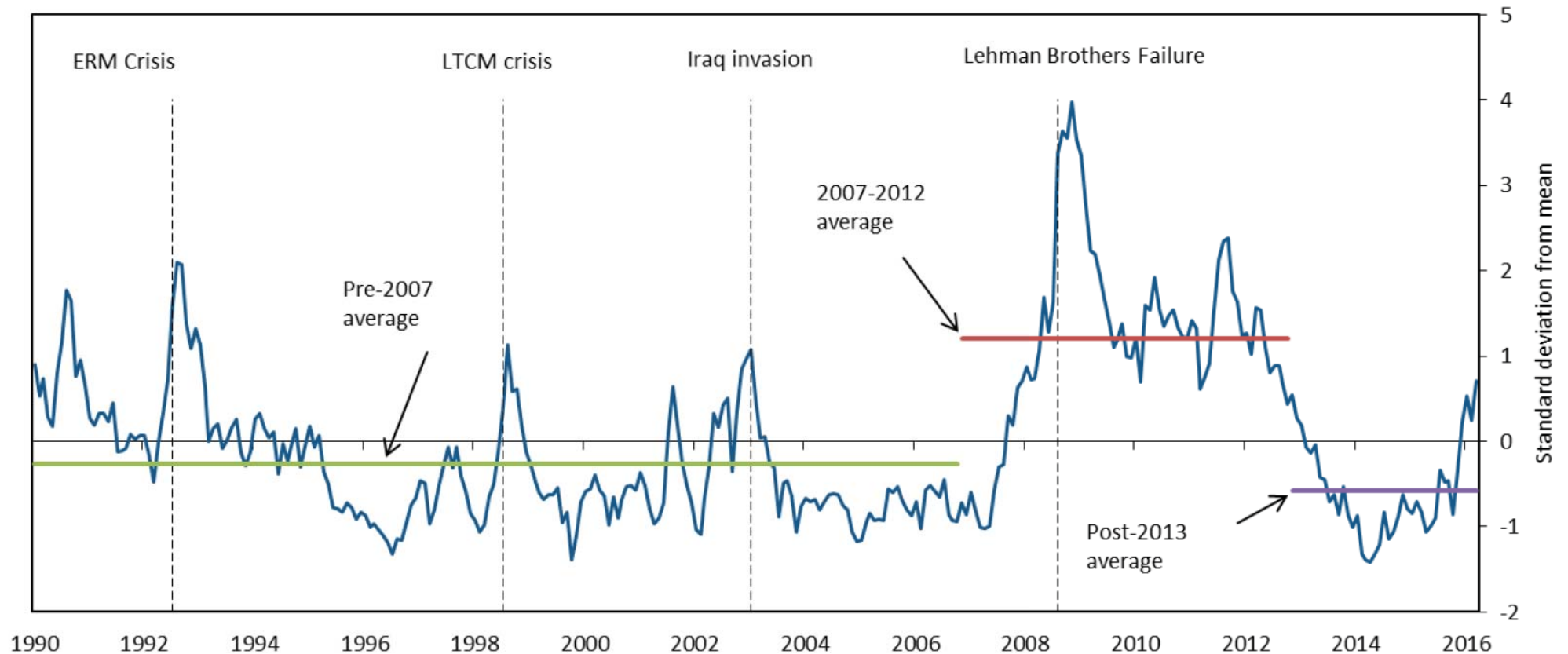


Source: Bank calculations and Caldara and Iacoviello (2016), *ibid.*

# The Role of Uncertainty: Economic

## Carney (2016)

**Chart 2: UK economic uncertainty spiked after the failure of Lehman Brothers**



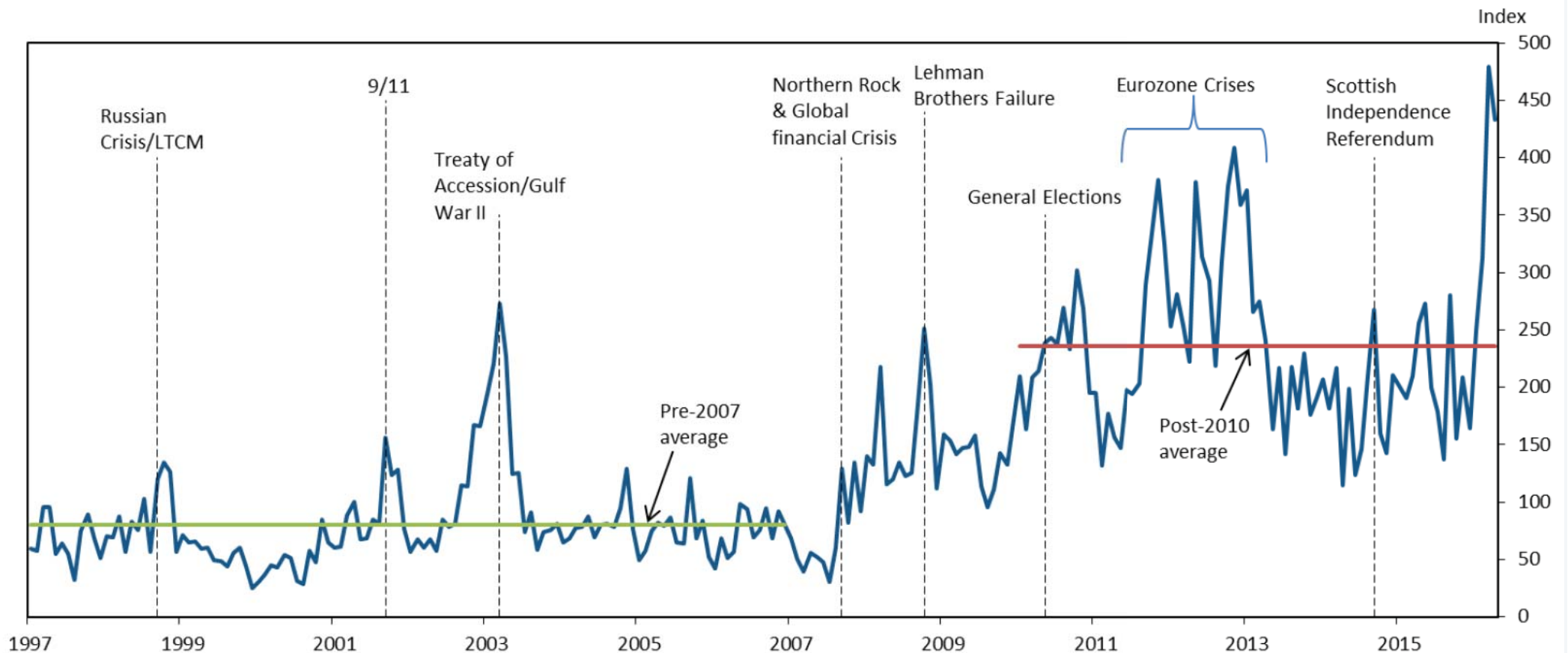
Source: Bank calculations and Haddow et al (*ibid.*). Shows data to end-May.



# The Role of Uncertainty: Policy

## Carney (2016)

**Chart 3: UK economic policy uncertainty has increased since the global financial crisis, rising sharply higher in early 2016**

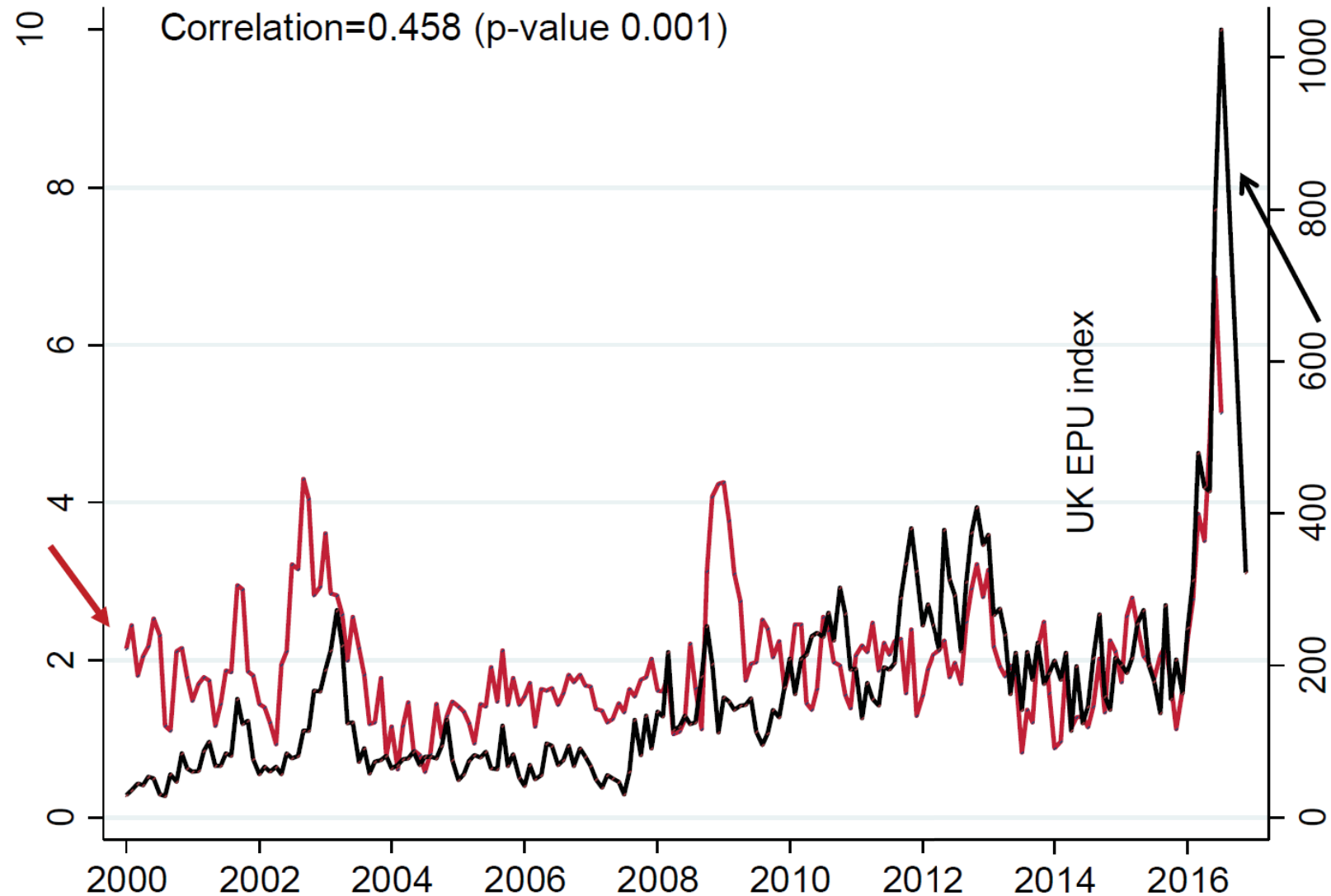


Source: Bank calculations and Baker et al, (2015), *ibid*.

# Even Higher Using News EPU

Source: [www.policyuncertainty.com](http://www.policyuncertainty.com)

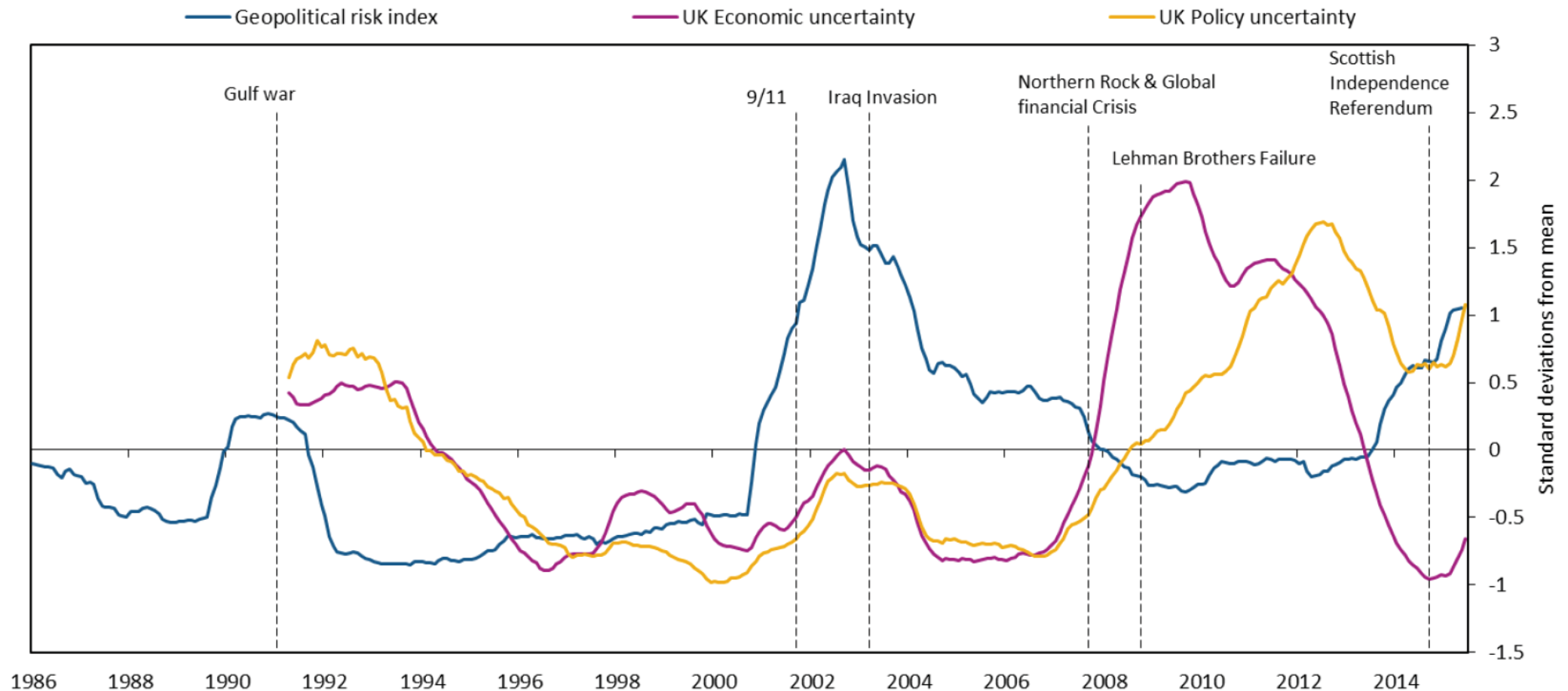
## News EPU index vs the Bank Uncertainty Index



# The Role of Uncertainty: Three Periods

Carney (2016)

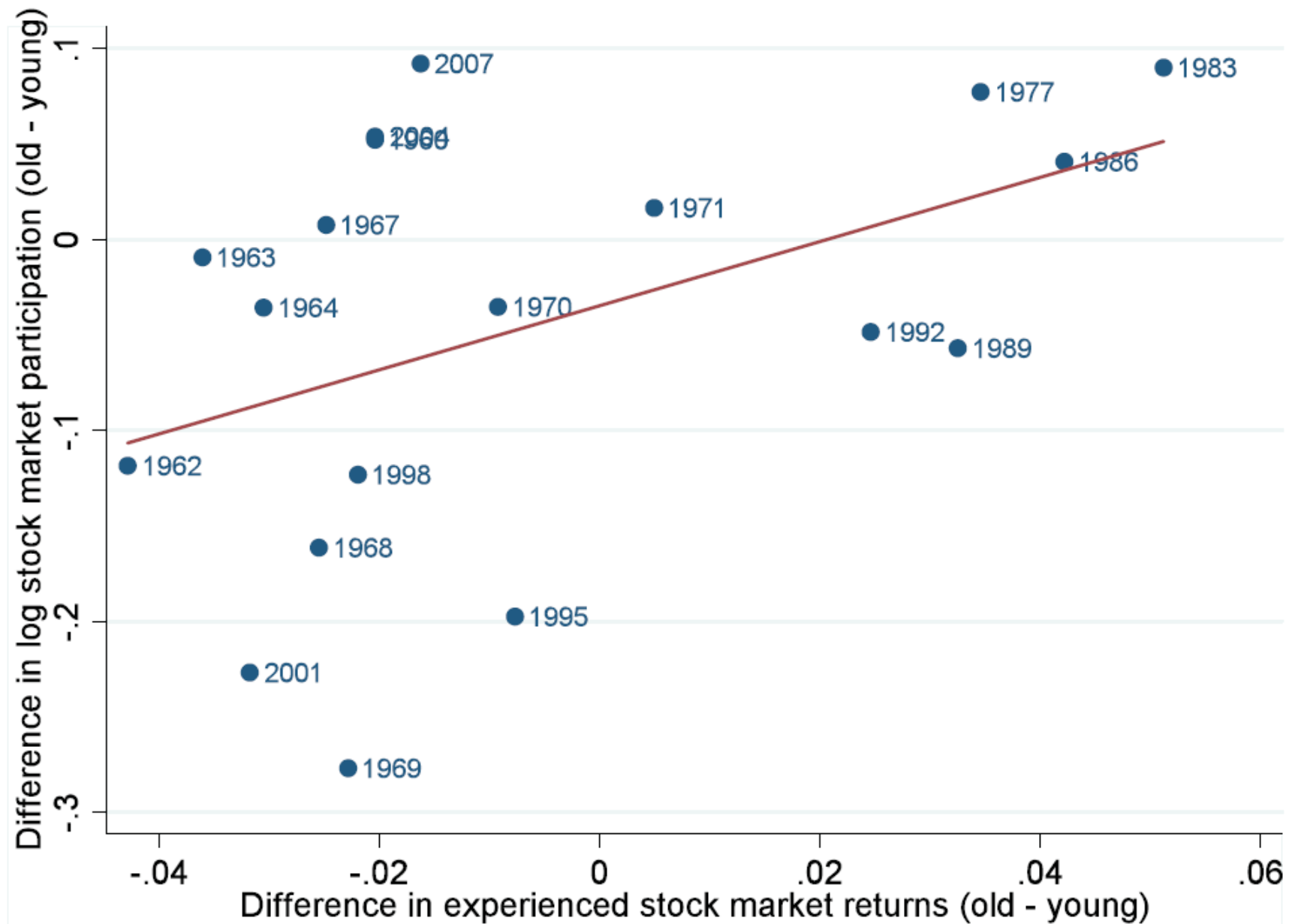
**Chart 4: Three eras of uncertainty: geopolitical from 9/11 to 2008; economic uncertainty from 2008 to 2012; and policy uncertainty today.**



Source: Bank calculations and authors cited in Charts 1-3 above. Economic policy and geopolitical uncertainty indices are de-measured and shown relative to their respective standard deviations. Chart shows two-year centred moving average for each measure.

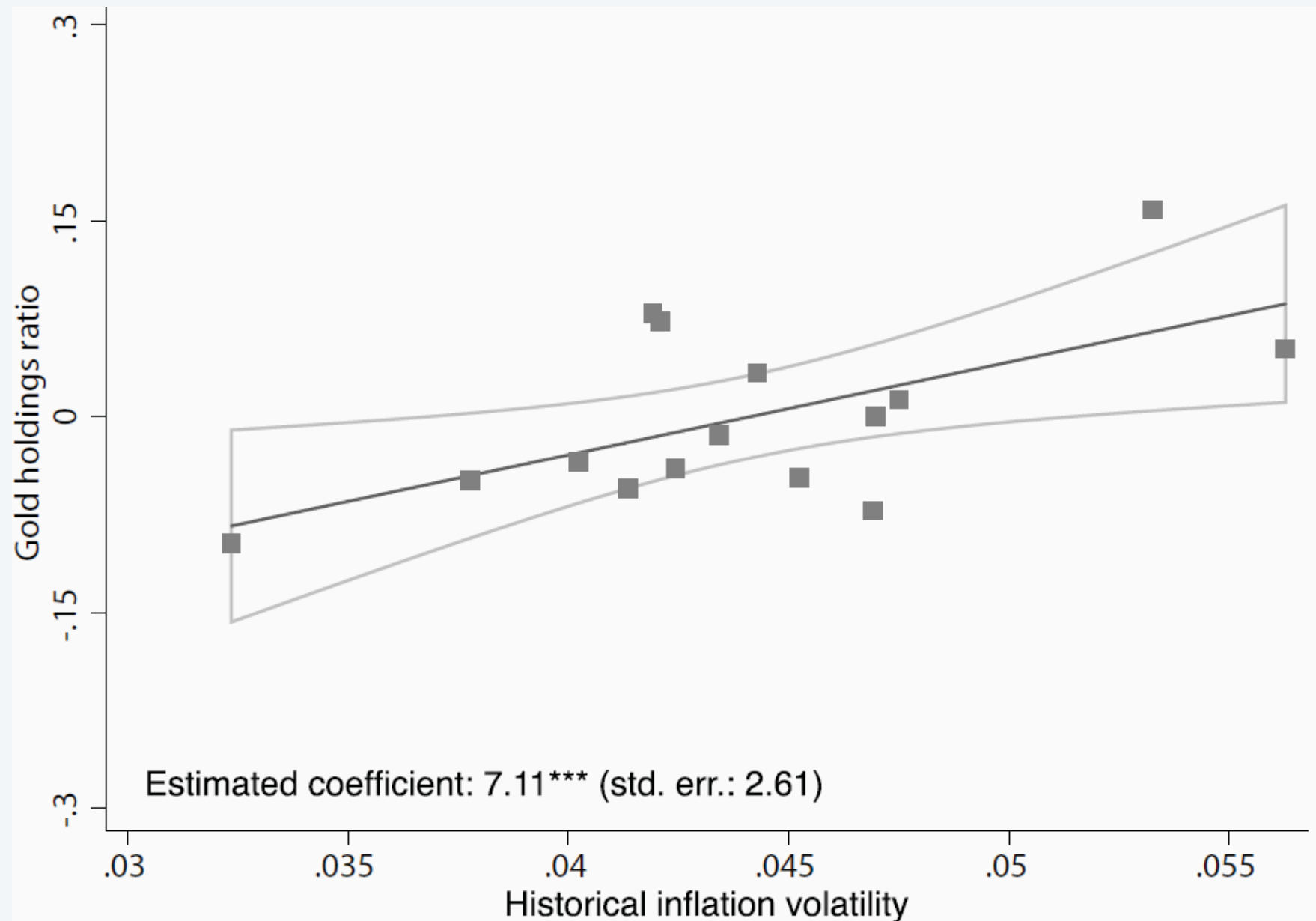
# The Role of Uncertainty: Depression Babies

Malmendier and Nagel (2011)



# The Role of Uncertainty: Inflation Experience and Gold

Badarinza, Balasubramaniam, Ramadorai (2016)



# The Effects of Uncertainty

- Baker, Bloom, Davis (2016) suggest using past VAR evidence that GDP in the UK may take a 1% hit as a consequence of post-Brexit uncertainty.
  - Biggest effects forecasted on investment by large (domestic and foreign) firms.
- More generally, the longer-term consequences of the uncertainty shock look negative given Malmendier and Nagel's evidence and ours in India.
- Difficult to see how passporting/equivalence uncertainty can help UK financial sector.
- Of course, a lot depends on reaction of policymakers to Brexit shock.
  - An infrastructure spending spree (Heathrow, HS2, CrossRail, Hinkley Point) will help.
  - Reaching out to do quick trade deals in Asia will help.

# Conclusion

- UK is heavily reliant on the City.
- International finance currently the major source of the City's dominance.
- These businesses highly sensitive to political risk.
- Policy uncertainty a significant complicating factor in both the long and the short run.
- Significant policy moves on infrastructure, and moves to invest in fast-growing areas (fintech, data science) will be a plus.
  - But such high-growth areas require global talent, so immigration policy will be another important area to watch.

