Specialising in risky mortgages:

unintended consequences of Basel II

Peter Eckley

Sept 2016

Introduction:

Aim of the paper to investigate effect Basel II reforms on the mortgage market

The key change: "risk-weighting" of loans changed which determines banks' capital requirements

- **BEFORE – Mortgages had a risk-weight of 0.5**
- **AFTER – Low LTV mortgages had a risk-weight of 0.35**
  High LTV mortgages valued at 0.75

BUT Banks could construct their own risk models and most larger banks now have own model (IRB)

The paper looks at the effect of the reform

on the interest rate and on market share

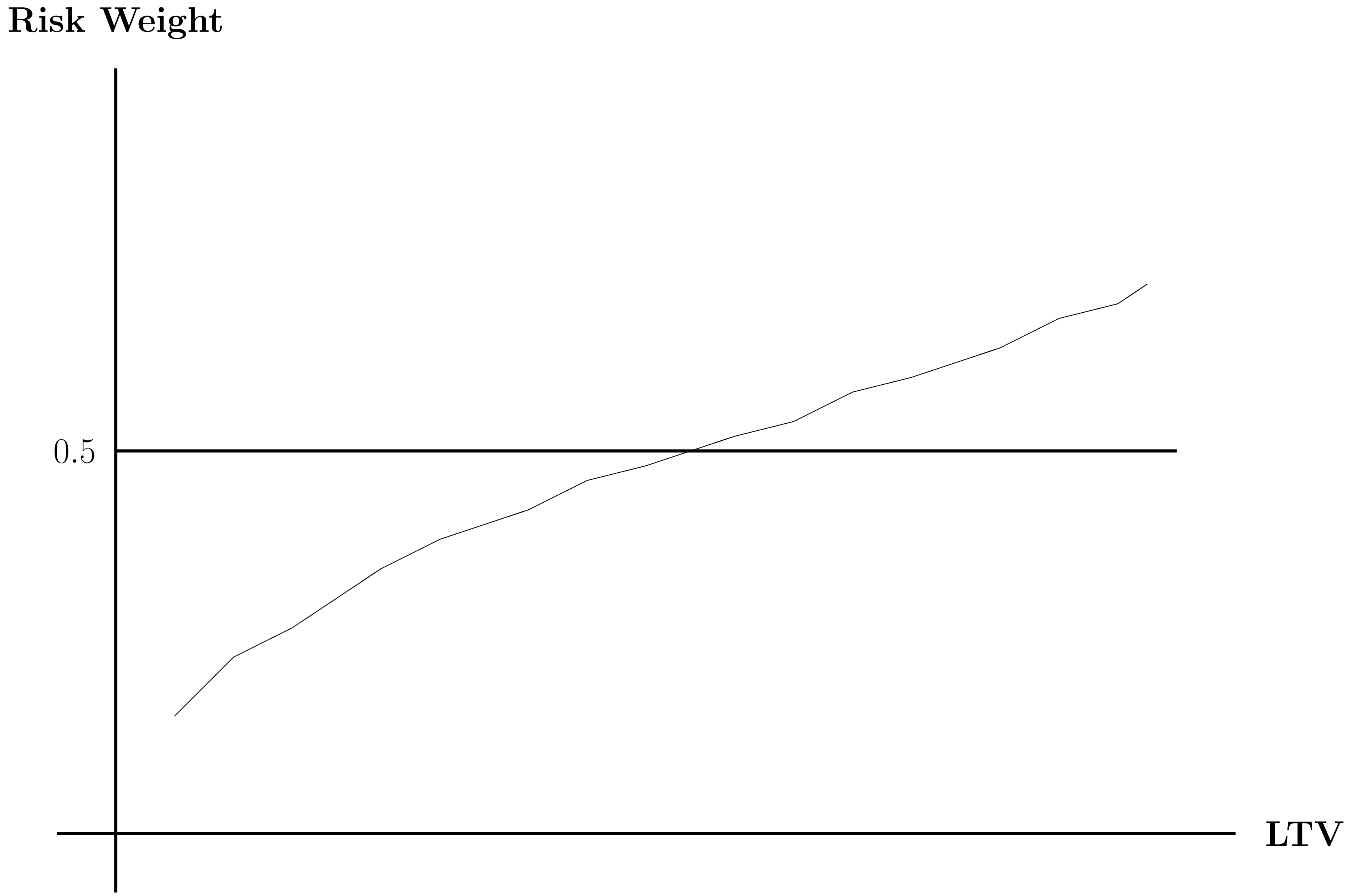
Uses individual loan data in DDD-model

- **before 2008 reform versus after 2008 reform**
- **high LTV versus low LTV**
- **own risk-model (IRB) versus standard model (SA)**

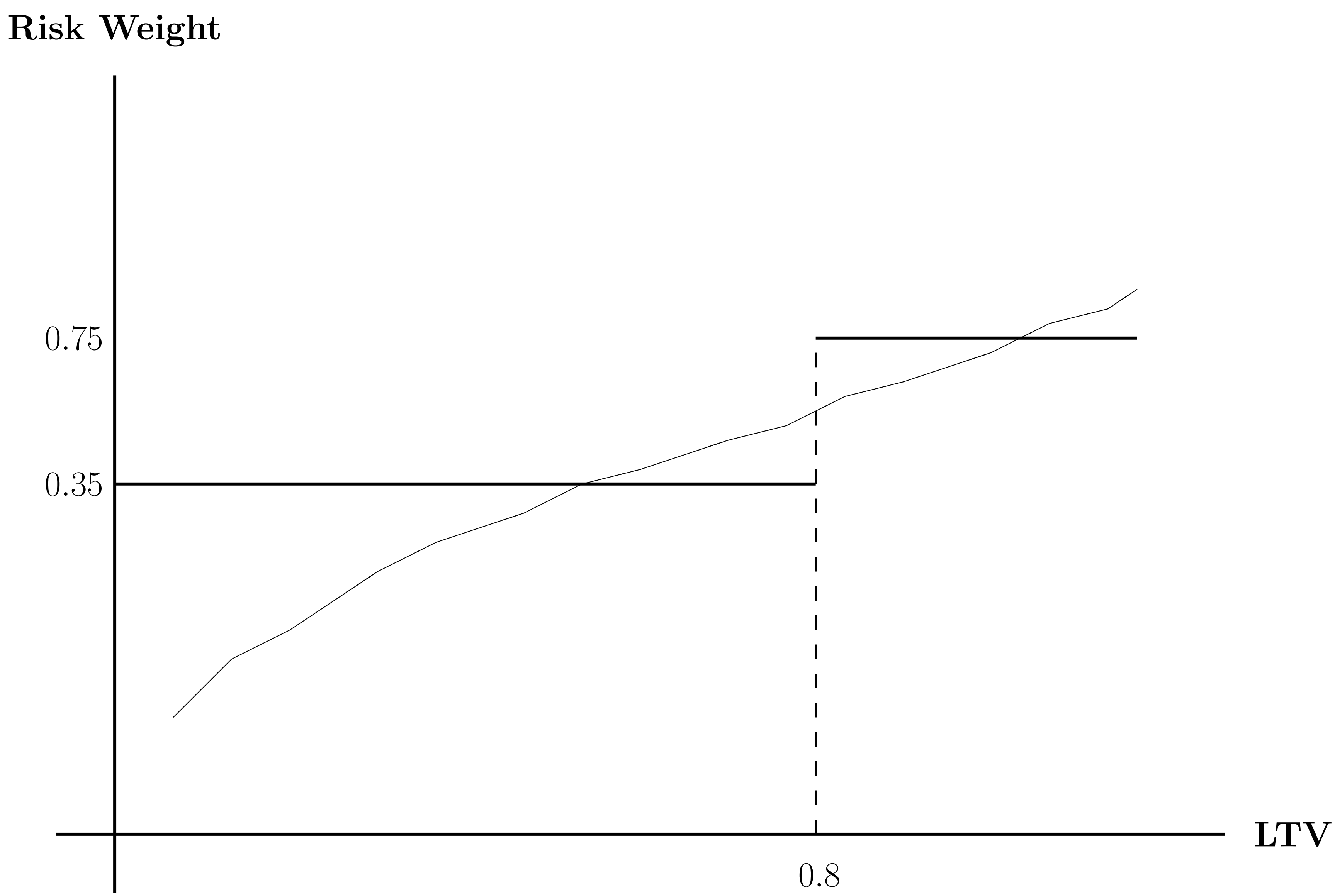
Finds: there is an effect on interest rate and market share

Aside: how do you define the interest rate on the mortgage

e.g. 'teaser rates', fixed terms, arrangement fees etc.



Risk Weights Before Basel II



Risk Weights <u>After</u> Basel II

What is the expected effect of the reforms?

Before the reform:

interest rate spread should be compressed

incentive to give credit to risky borrowers

After the reform:

market segmented IRB (low-risk) and SA (high-risk)

with SA banks exploiting regulatory arbitrage

You found bigger interest effect post-2008 from lower LTV cutoff

LTV	0.70	0.75	0.80
Interest Rate	-0.451	-0.314	-0.246

Your comments about identification:

1: "***It is possible that IRB and SA firms may attract different borrowers that are more or less risky than average.***"

2: "***the main factor in adopting IRB is not the riskiness of the portfolio...[which] limits concerns about self-selection based on risk.***"

3: "***our coefficient may be biased if (i) lenders price in credit risk which is unobservable to us, and (ii) this unobserved credit risk is correlated with risk weights.***"

4: "***Any bias would have to arise due to the larger IRB banks attracting substantially different customer risk profiles.***"