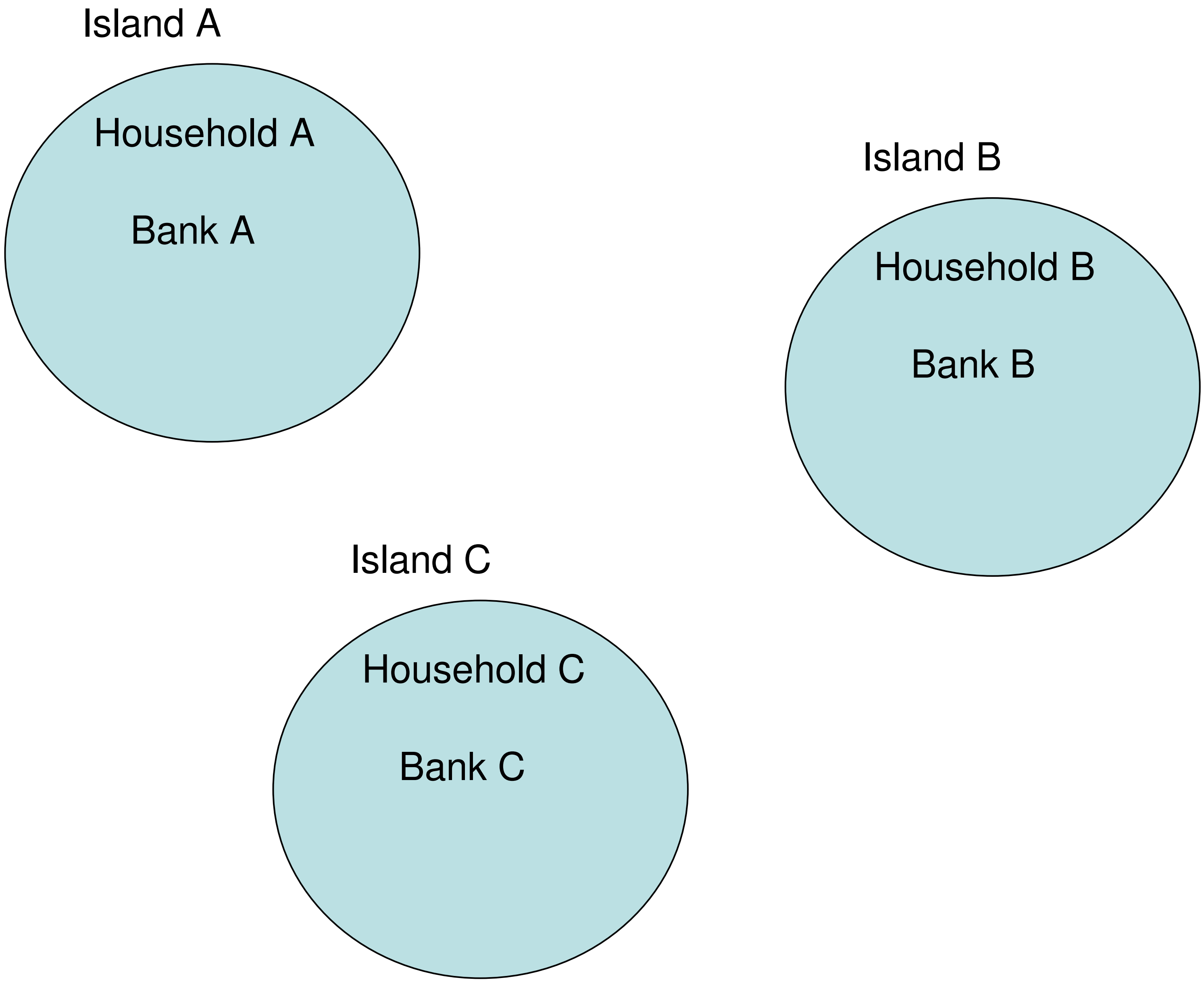
Comments on Gertler and Kiyotaki

Mardi Dungey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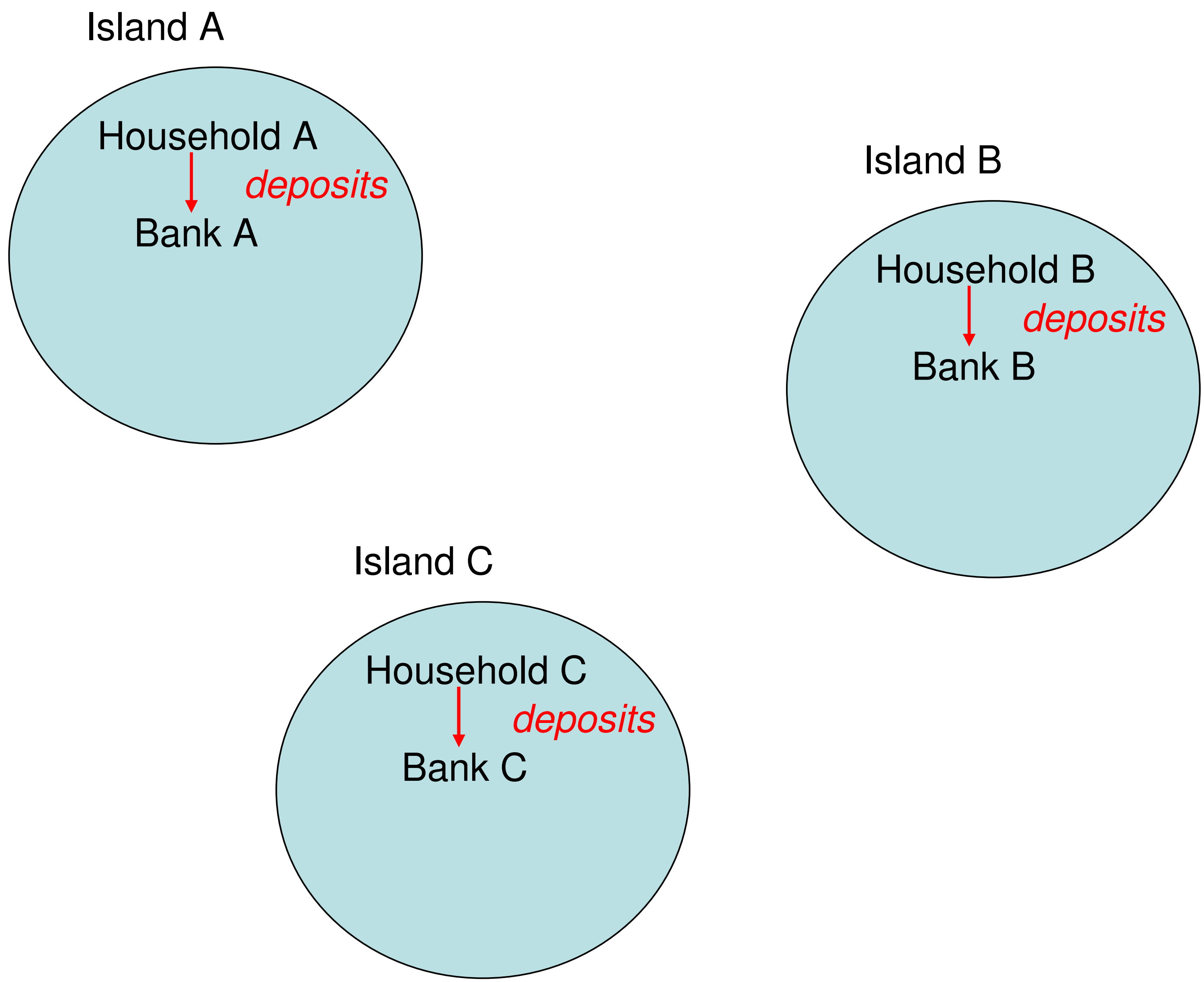
Bank A
Island B
Household B
Bank B
Island C
Household C
Bank C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Island C
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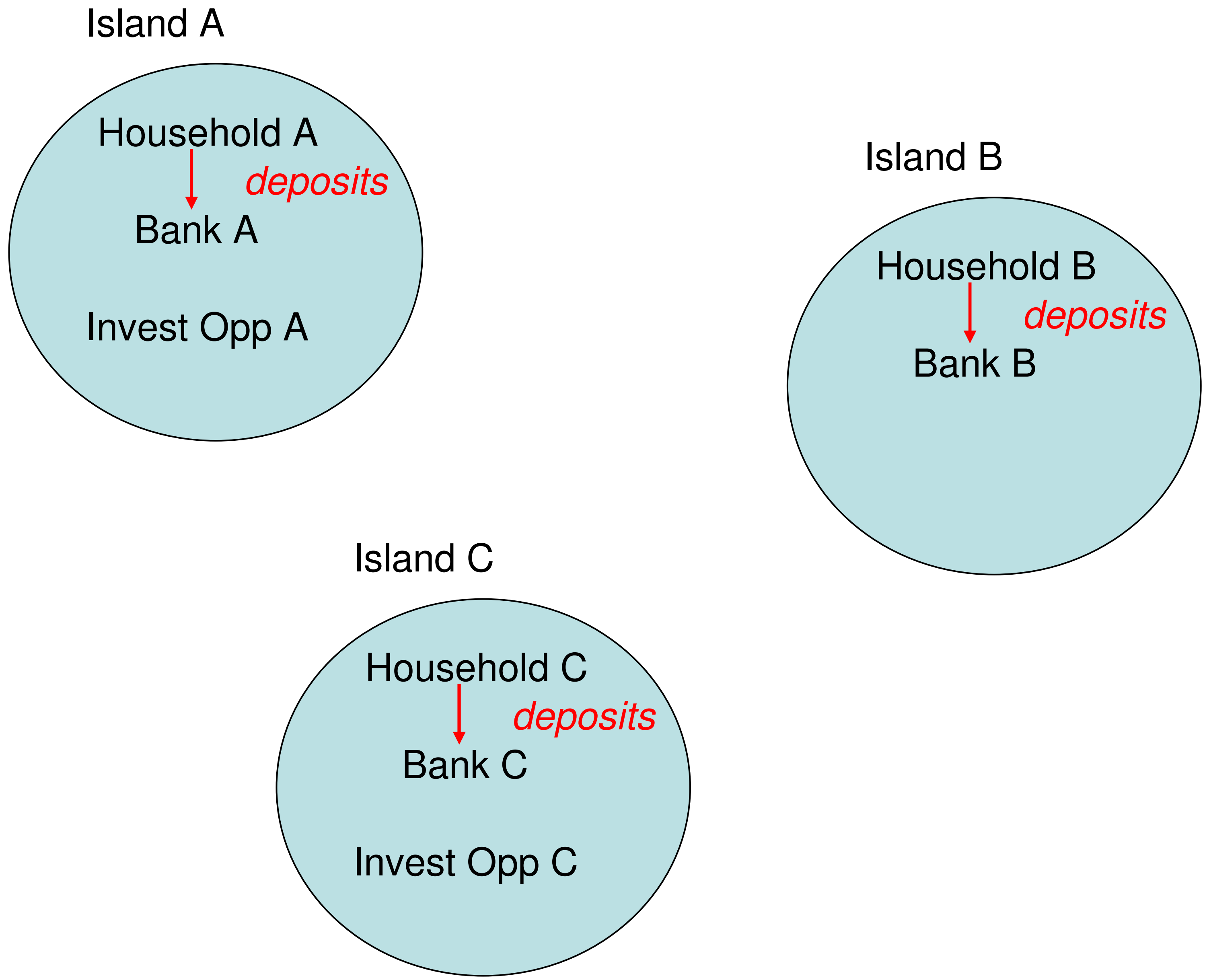

Island A
Household A
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Invest Opp A
Island B
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Island C
Household C
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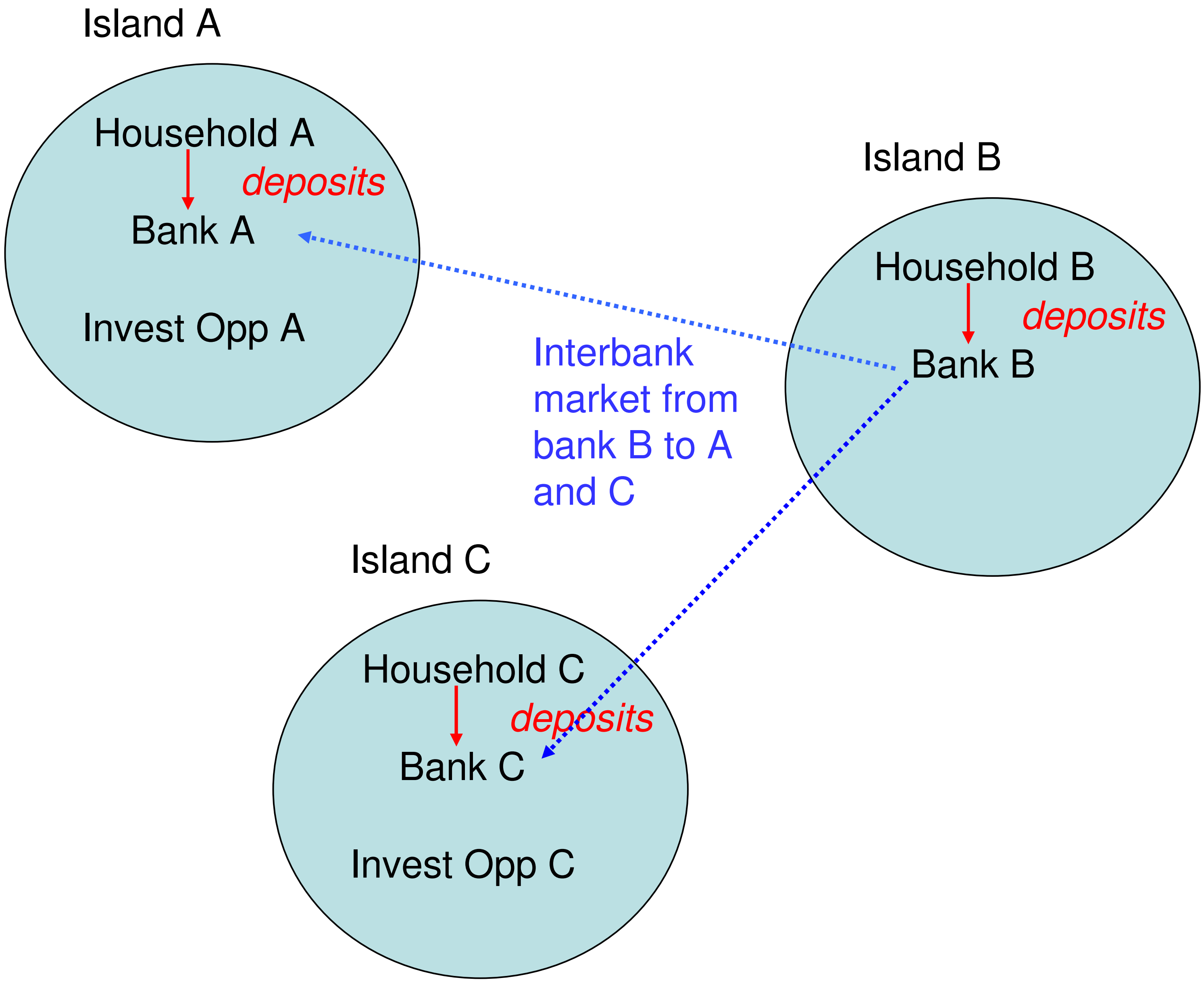
Bank C
Invest Opp C


Island A
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Island B
Household B
deposits
Bank B
Interbank market from bank B to A and C
Island C
Household C
deposits
Bank C
Invest Opp C

Timing

Period starts

Investment opportunities arise randomly

Period ends

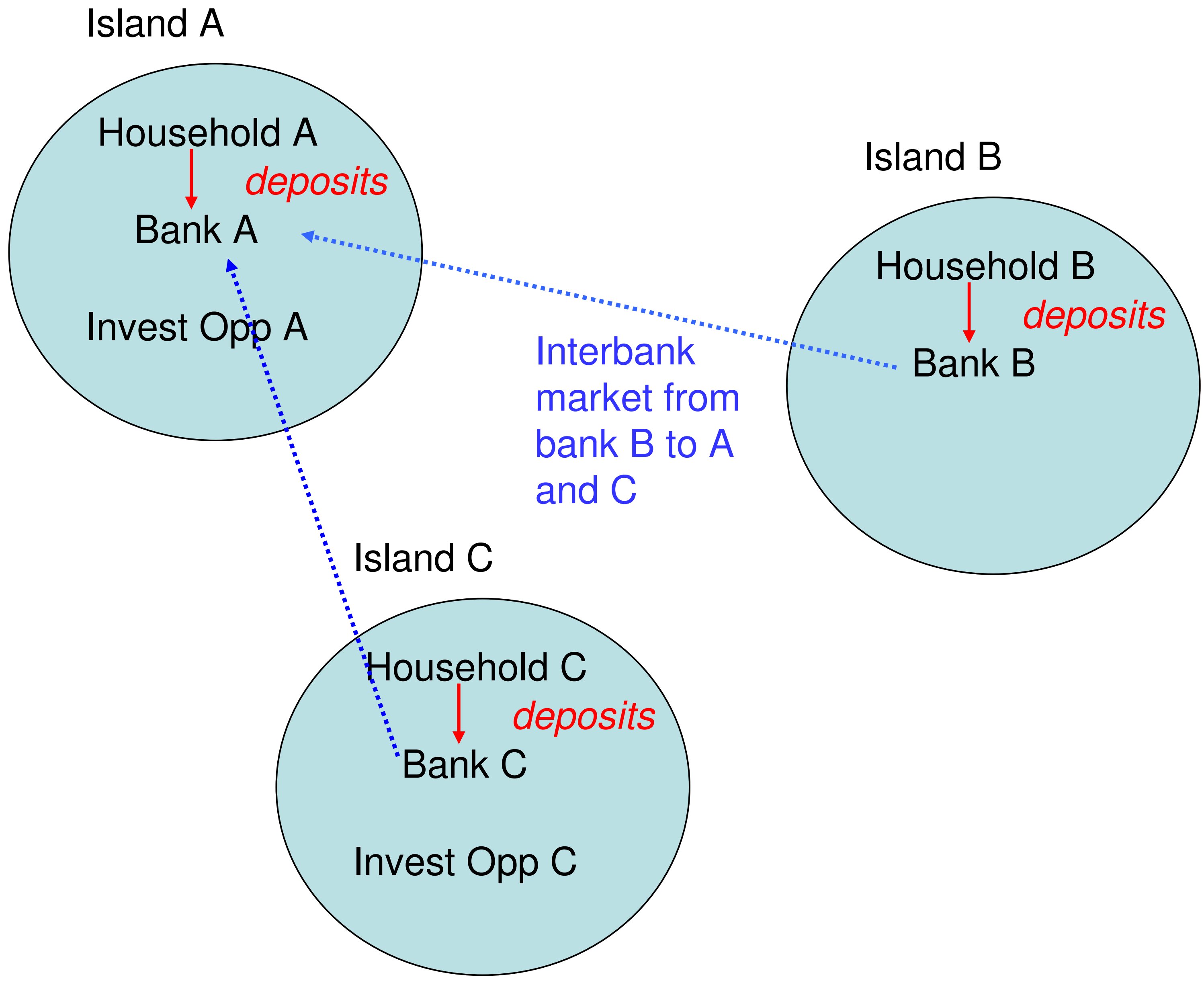
Banks raise deposits from households

Banks go to interbank market: borrow if they have new opportunities, lend otherwise

What is one period here? Might be wise to think of it as minutes or some other relatively high frequency period….. Eg Ashcraft and Duffie (2007)

Completeness

- "Banks can only make loans to non-finanical firms on the same island"
- "Banks on islands with new projects borrow from those with no new projects"
- Does a project necessarily exhaust all existing funds raised on an island?
  - Could there be interbank lending from C to A if the new project on C leaves some excess of funds?
  - Answer is that banks physically relocate to remove this problem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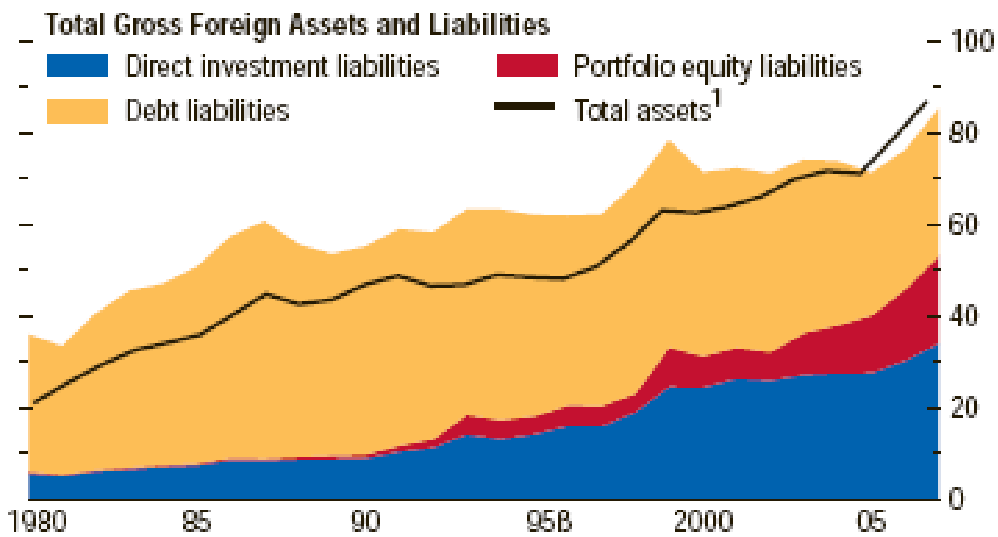
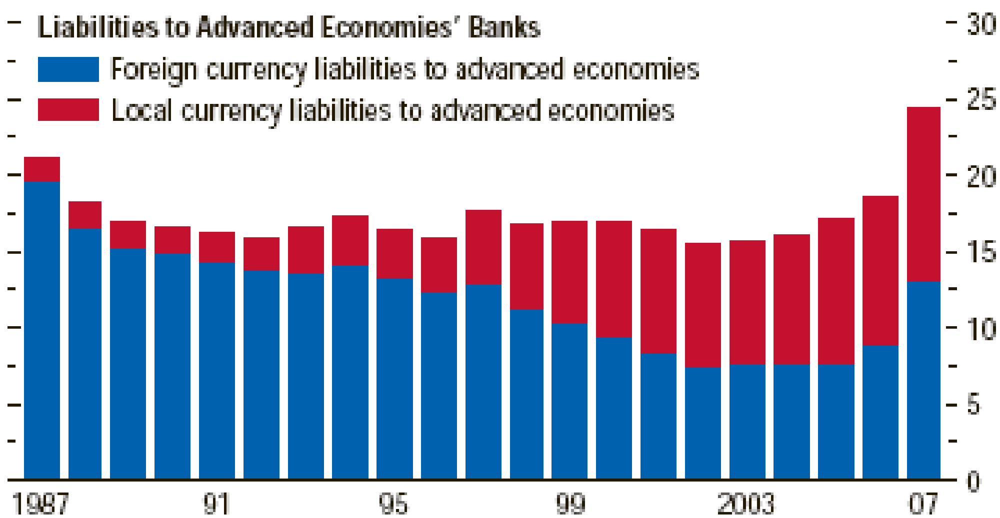
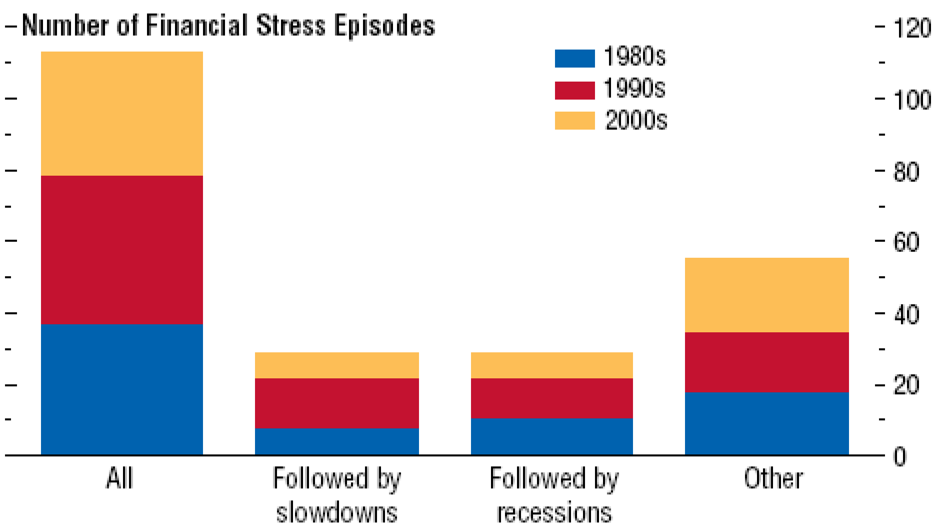
- International financial linkages are a major cause of problems
  - Transmission of shocks through banking relationships; literature on Asian crisis

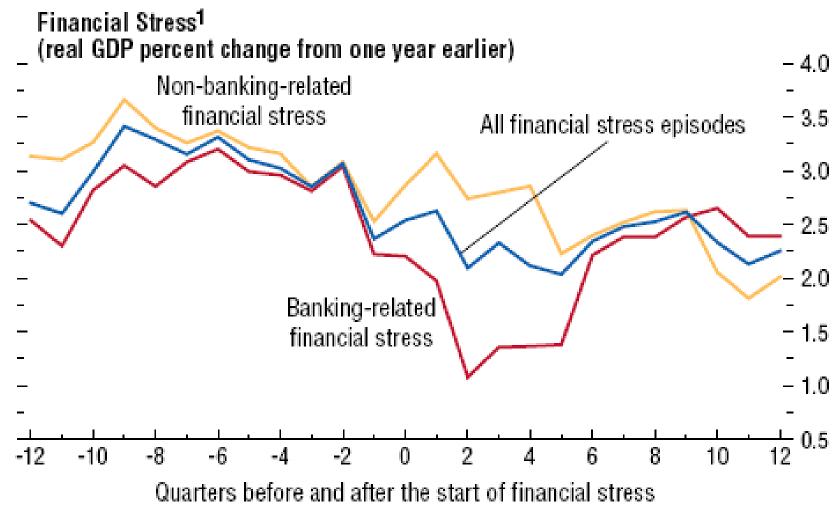




- •A major challenge is to allow for international (cross island) investment
- This shows the growing importance of debt liabilities for emerging countries and the exposure of developed economies banks to these economies
- Exchange rate risk??

- Only about half the episodes of financial stress are followed by slowdown or recession





- But its more likely if it was banking sector stress
- Can the model replicate the features of the business cycle?

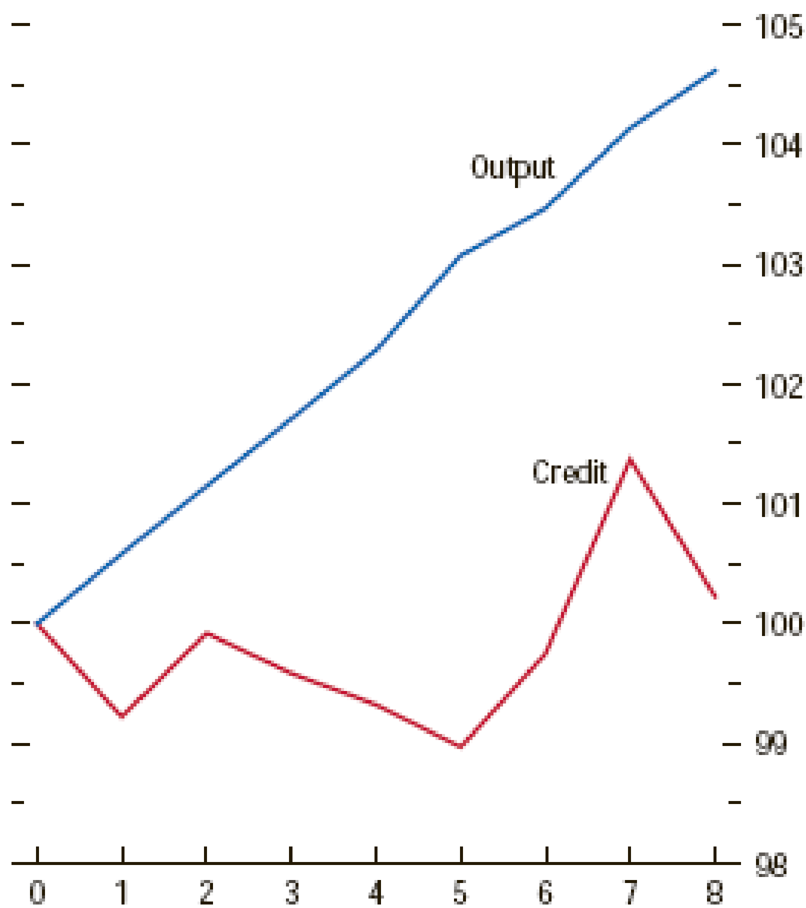
WEO(2008)

Business Cycles

- Pagan and Robinson 2010
- Take Smets and Wouters (2007) and Gilchrist, Ortiz and Zakraj (2009) model compare simulations with data

		Data	SW	GOZ
Duration	Expansion	13.6	15.4	14.2
	Contraction	4.8	4.5	4.3
Amplitude	Expansion	9.2	9.5	8.9
	Contraction	-2.8	-1.7	-1.6

Credit and recovery



Source: IMF staff calculations.

WEO(2009)

- In case of recovery from a recession with financial crisis credit recovery is extremely slow

- Supports the use of intervention policy
- results seems intuitively sensible
  - when is a crisis 'severe' enough to implement nonstandard measures?

A few stylized facts on interbank lending

- Heterogeneity matters:
  - Size of institution matters independent of credit spread (Ashcraft and Duffie 2007)
  - Assets and lenders are not homogenous (Gertler and Kiyotaki 2010)
- Relationships matter:
  - Active lenders receive lower rates (Ashcraft and Duffie 2007)
- Signalling matters:
  - Banks often forgo discount window borrowing even when it would be cheaper (the stigma effect) (Ennis and Weinberg 2009)