

India and loss of monetary policy autonomy

Ila Patnaik

April 2004

ipatnaik@ncaer.org

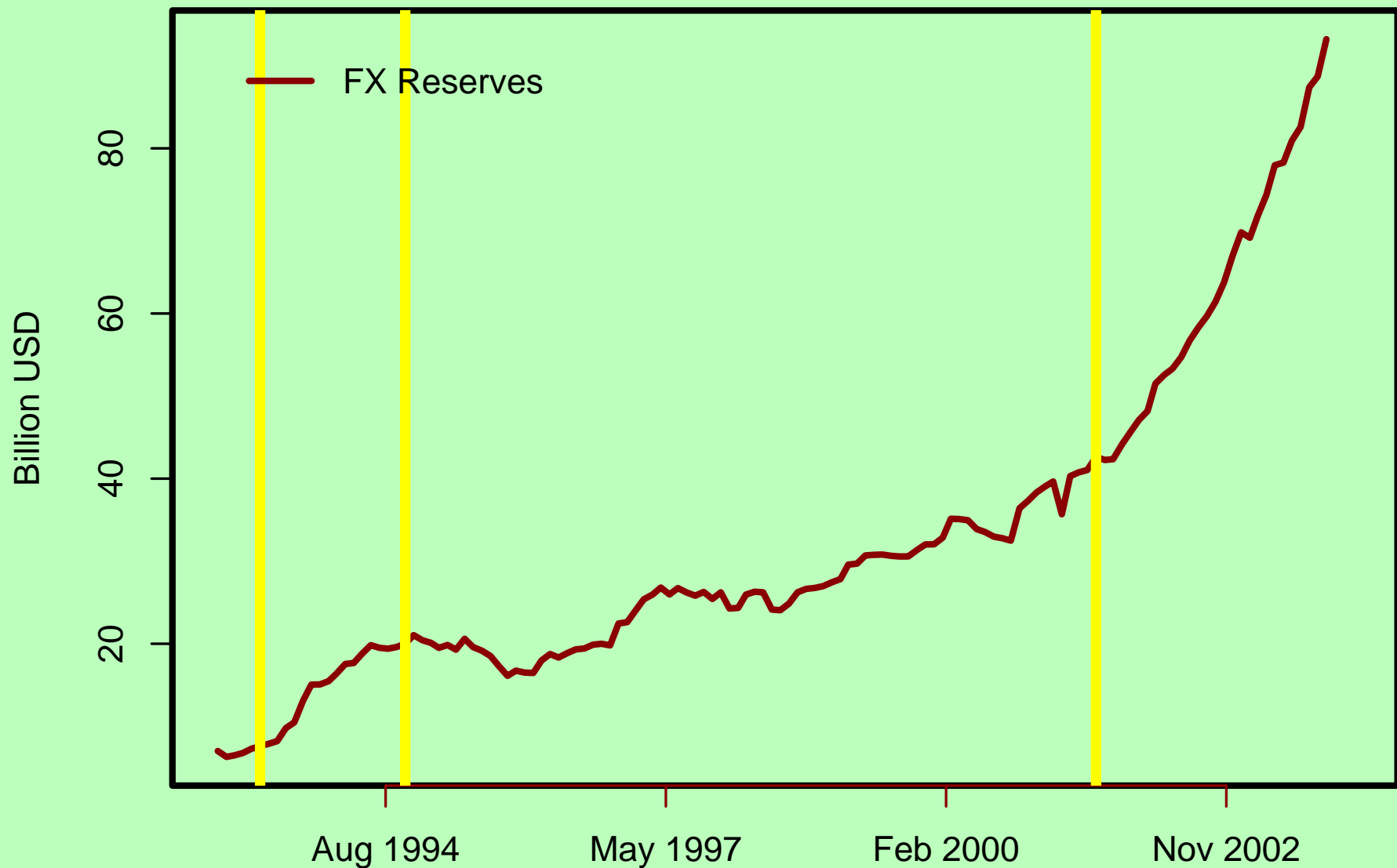
NCAER

Outline

- India's openness on the capital account
- Interest Parity
- Forward market mispricing

Understanding monetary policy in episodes of large currency trading by RBI

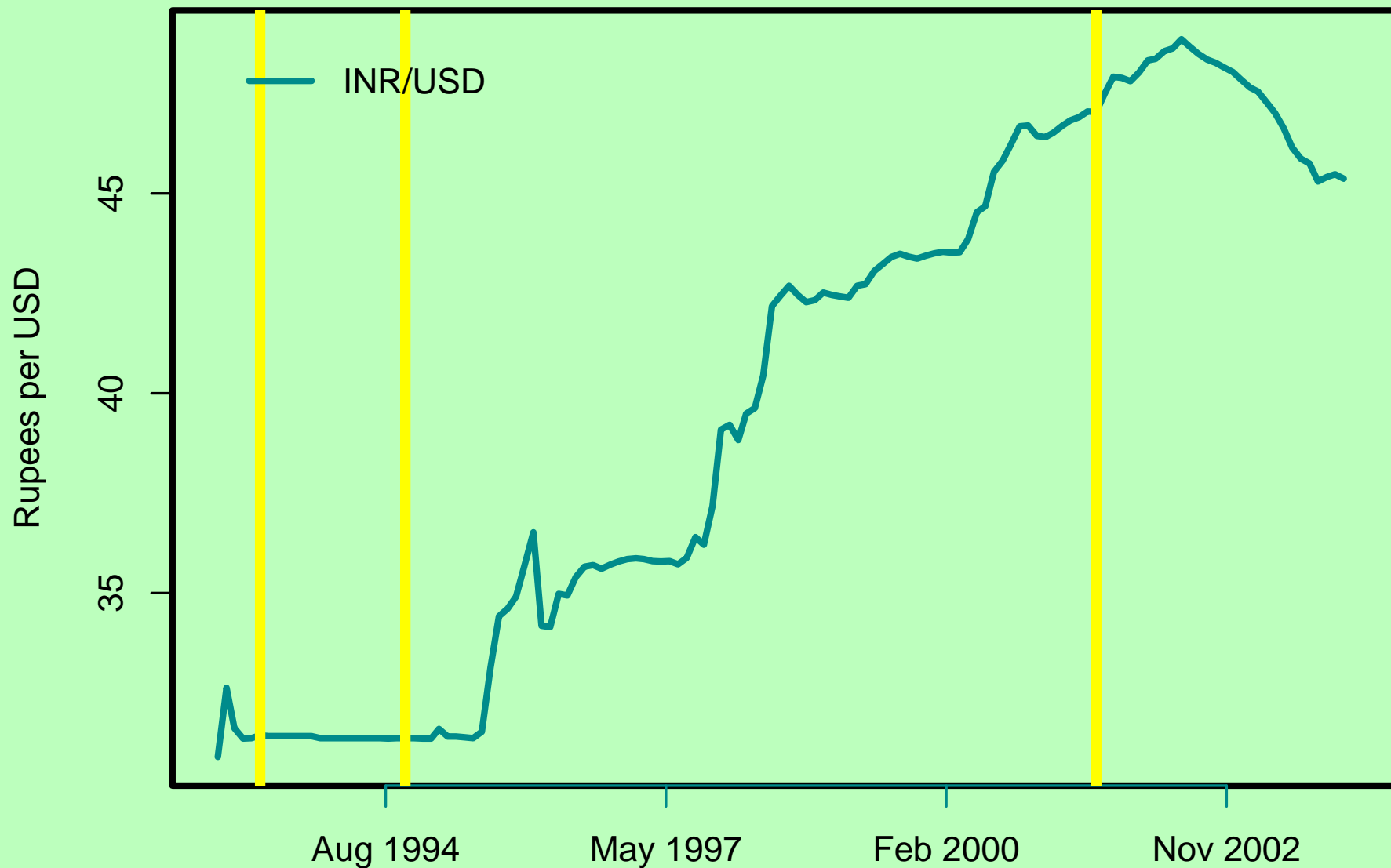
Reserves



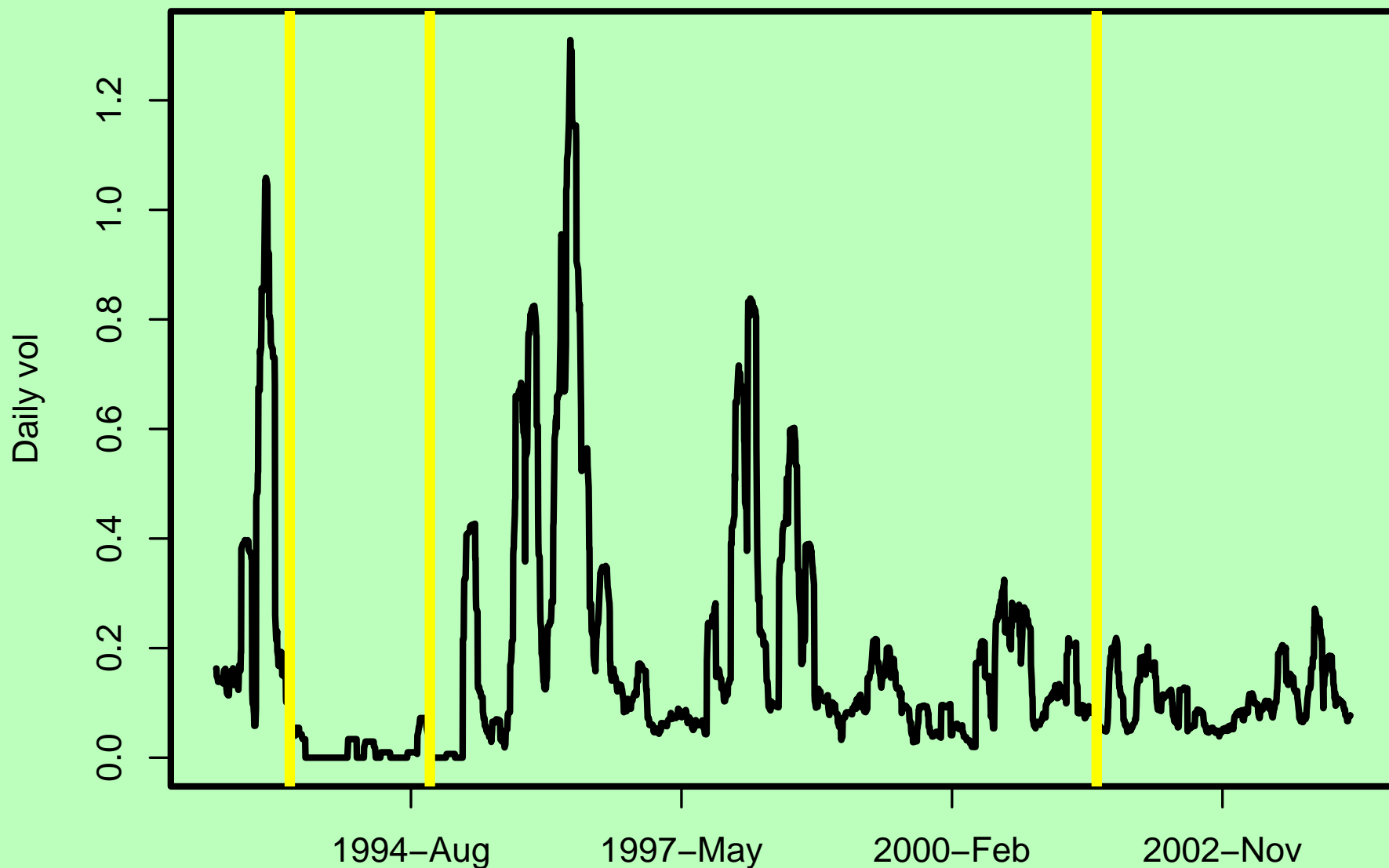
Dating two interesting episodes

Based on this, we argue that there are two episodes that merit attention:

- Episode 1: June 1993 to November 1994 (18 months)
- Episode 2: August 2001 onwards



Tightly pegged in both episodes



Framework for understanding each episode

1. Initiation
2. Fluctuations of the currency
3. What was the currency forward market thinking?
4. Was RBI's currency trading large compared with M_0 ?
5. Sterilisation - OMO and reserve requirements
6. Overall impact on M_3 and interest rates

Episode I

Initiation – capital market reforms, 1993

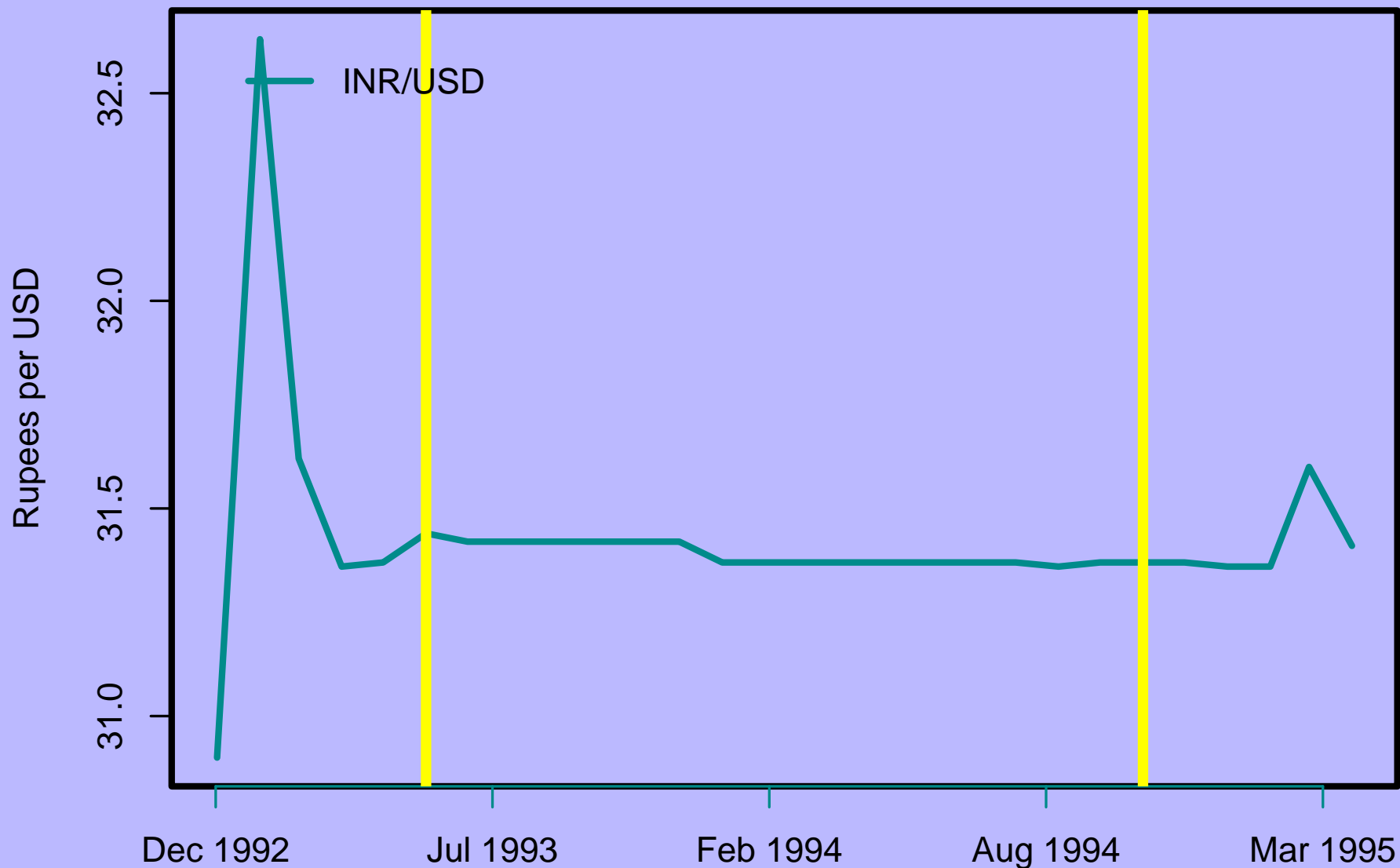
Foreign portfolio investment:

| Period | Inflow (Mln. USD) |
|------------|-------------------|
| Q2 1993-94 | 307 |
| Q3 1993-94 | 935 |
| Q4 1993-94 | 2283 |

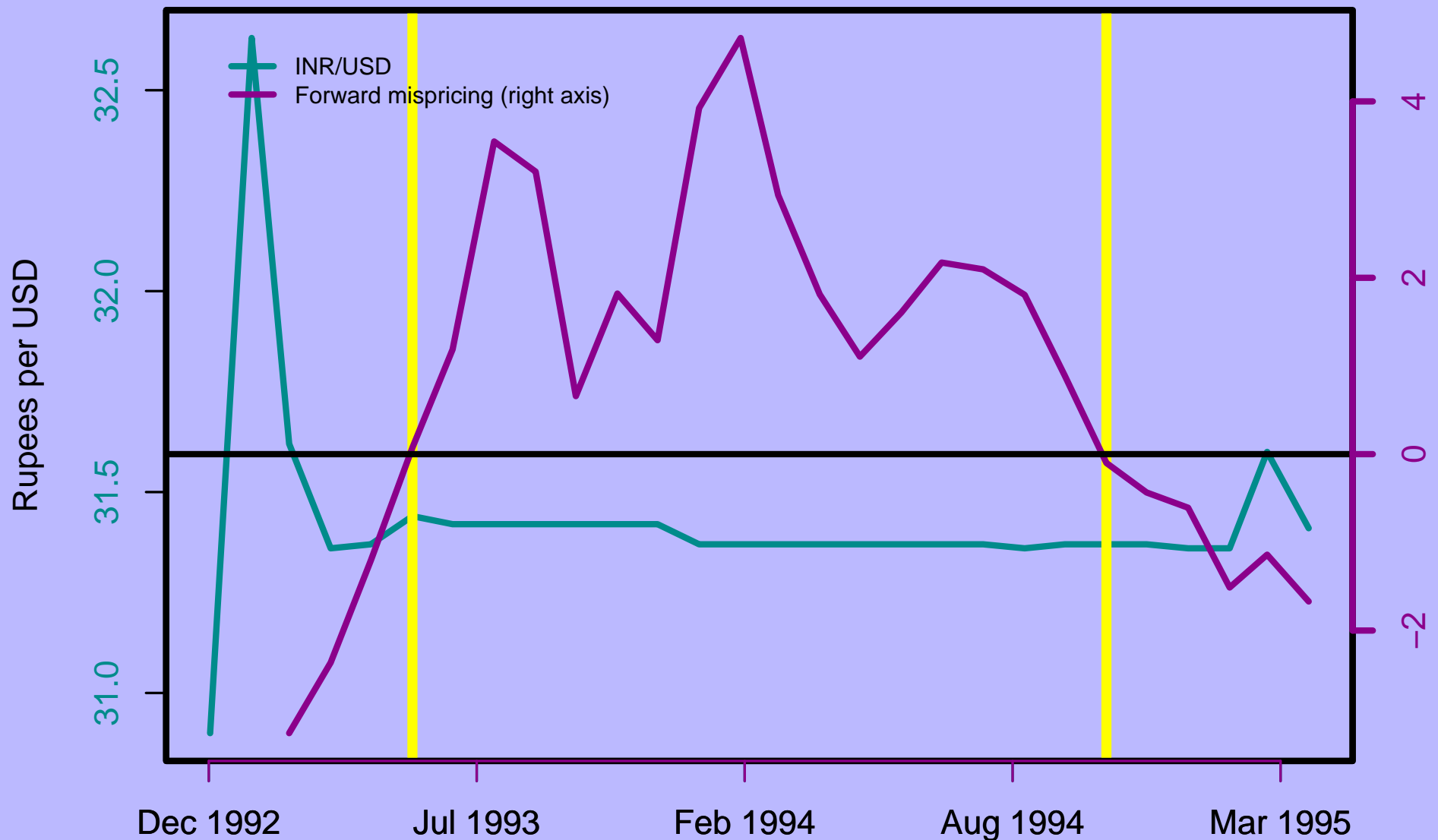
Evolution of BOP in Episode I

| (Billion USD) | | |
|---------------|-----------------|-------------|
| Year | Current account | Net capital |
| | balance | Inflows |
| 1991-92 | -9.6 | 3.7 |
| 1992-93 | -1.2 | 2.9 |
| 1993-94 | -1.2 | 9.6 |
| 1994-95 | -3.4 | 9.1 |
| 1995-96 | -5.9 | 4.7 |
| 1996-97 | -4.6 | 11.5 |

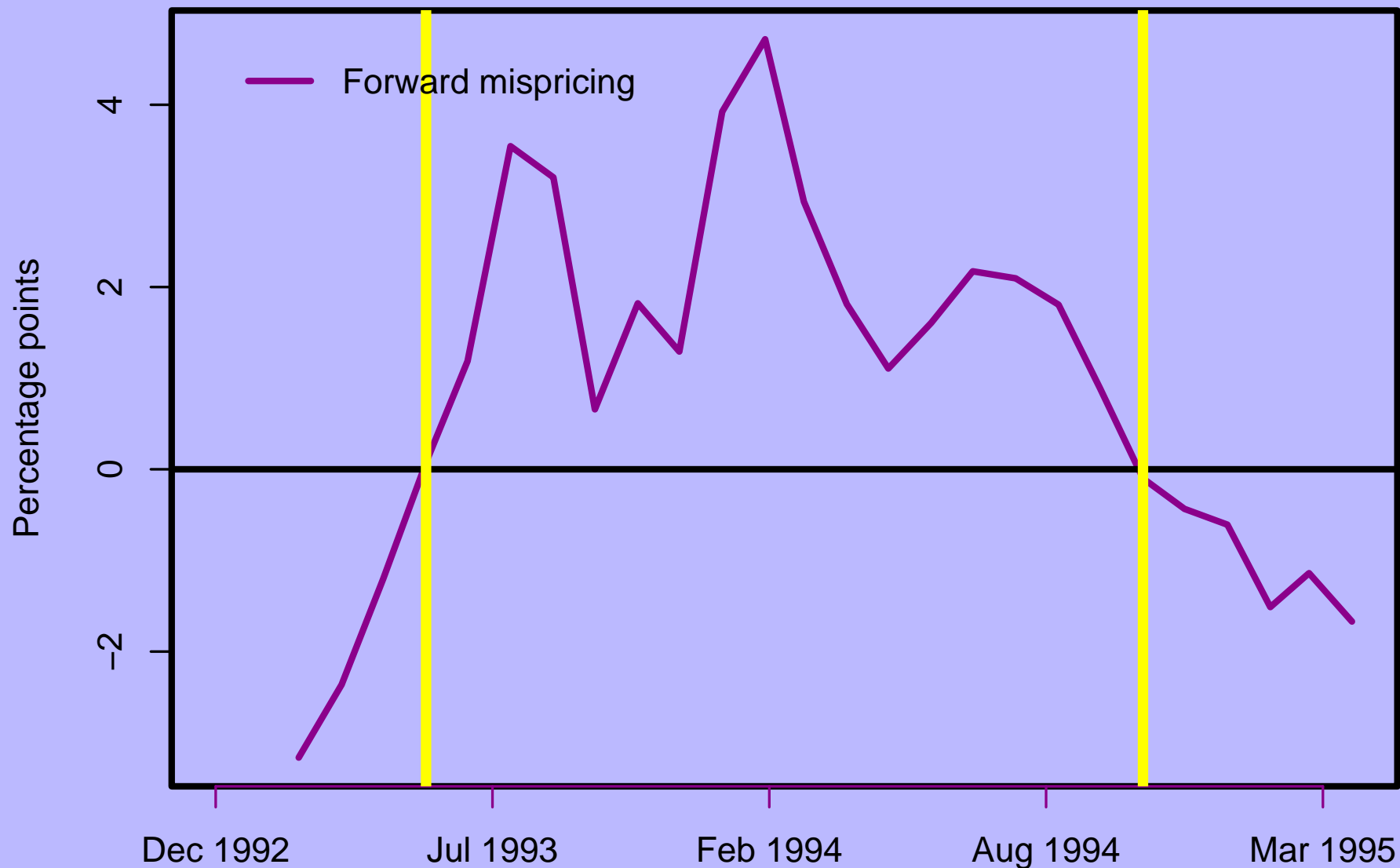
Sequence of events in Episode I



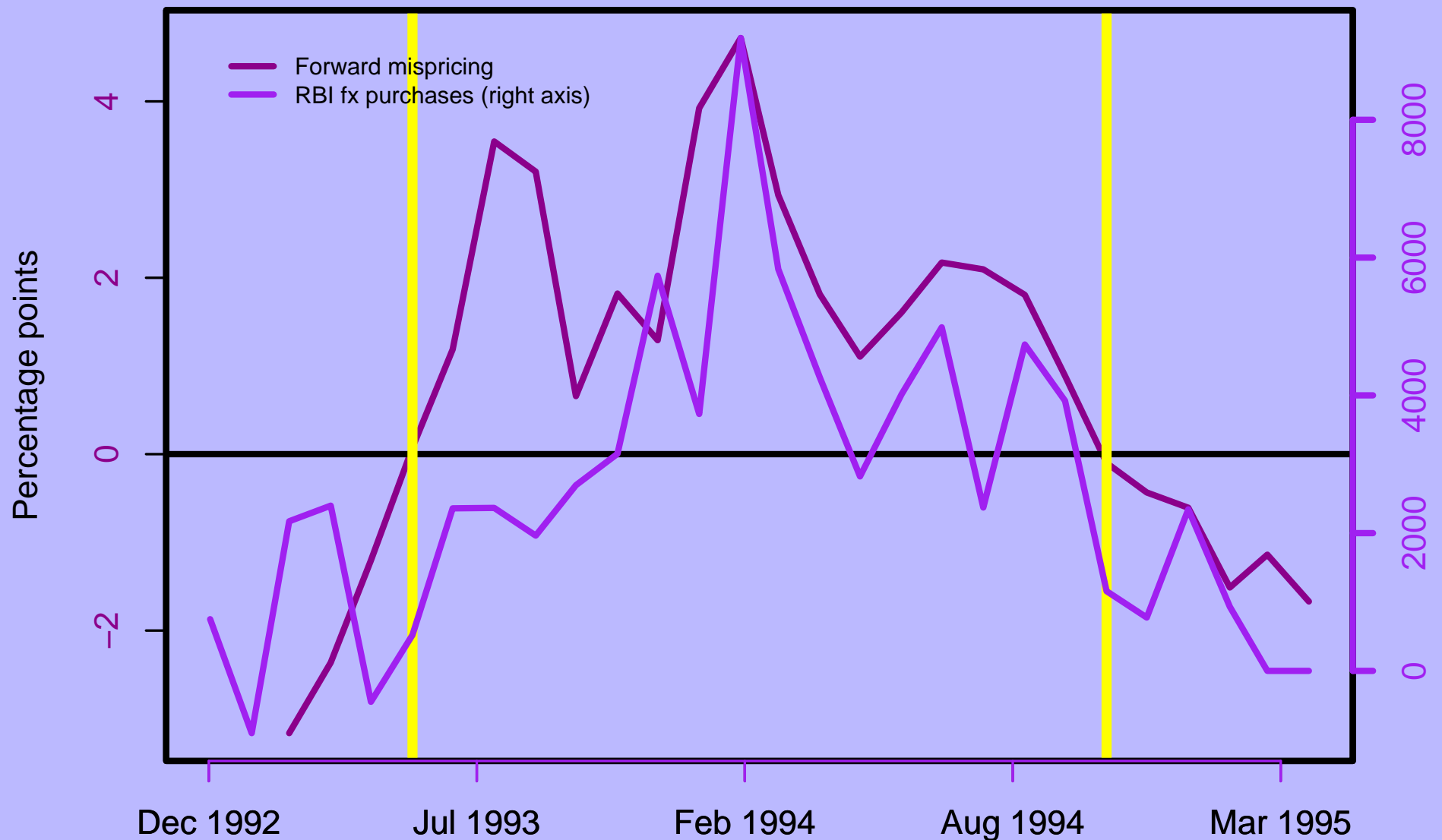
Sequence of events in Episode I



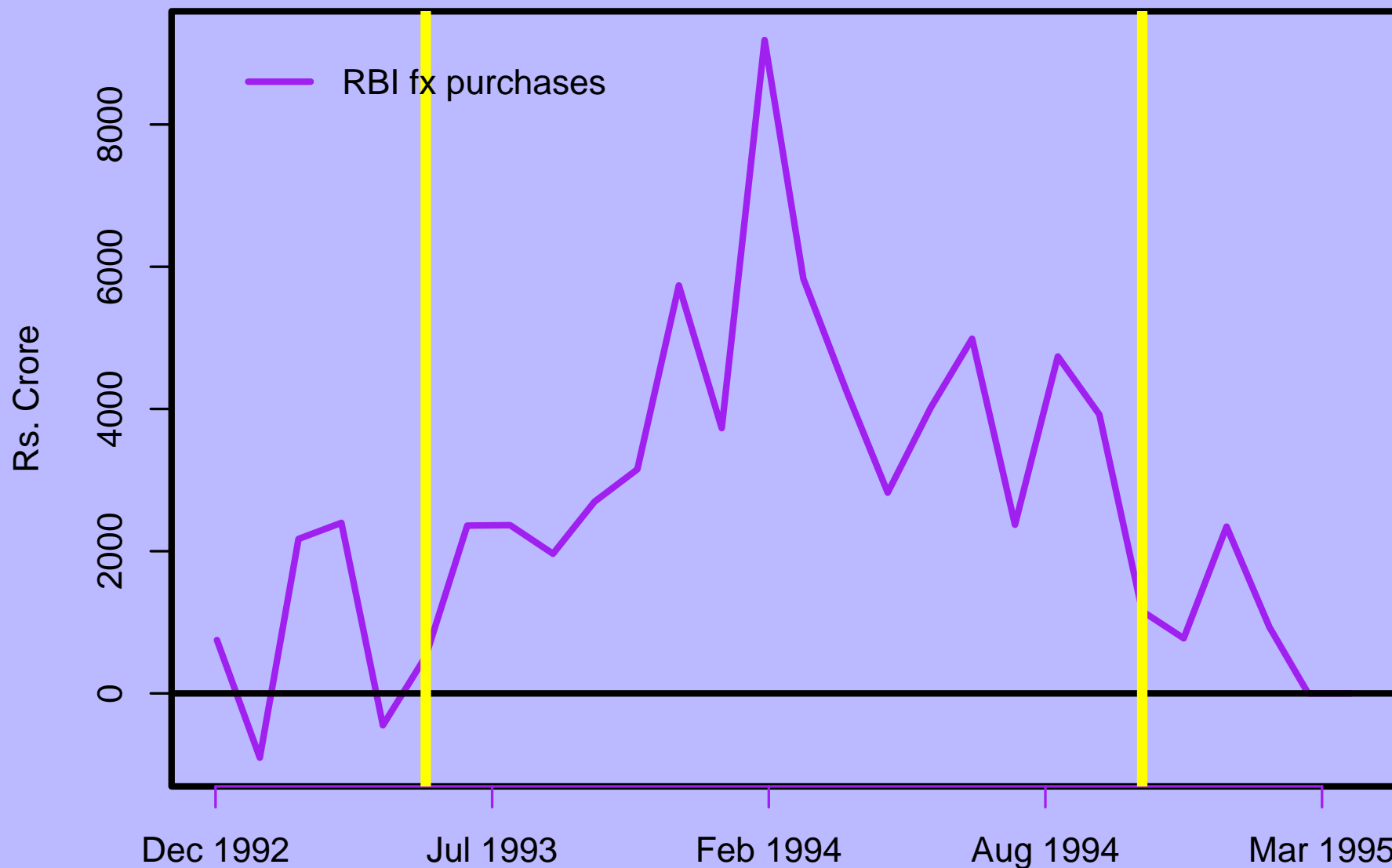
Sequence of events in Episode I



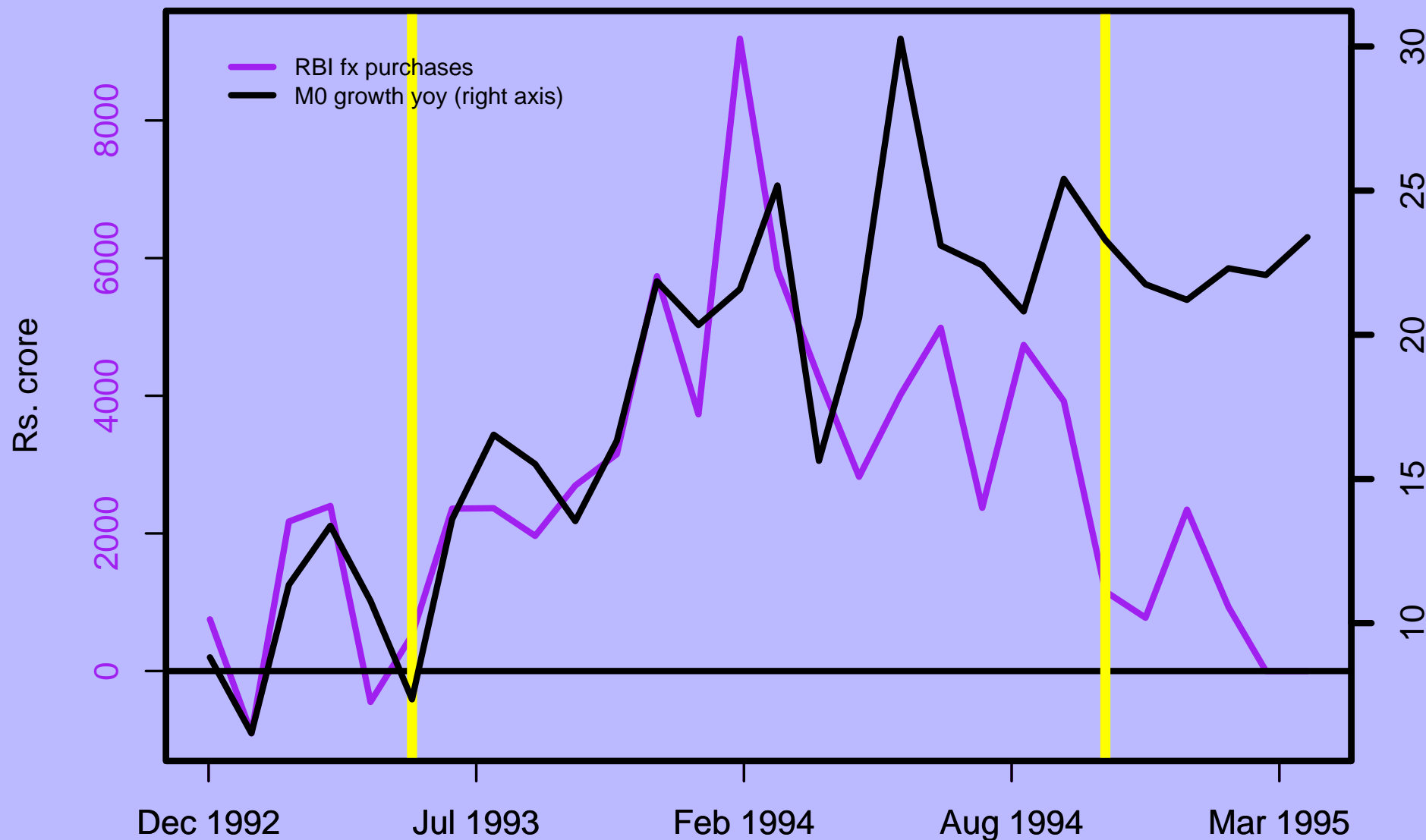
Sequence of events in Episode I



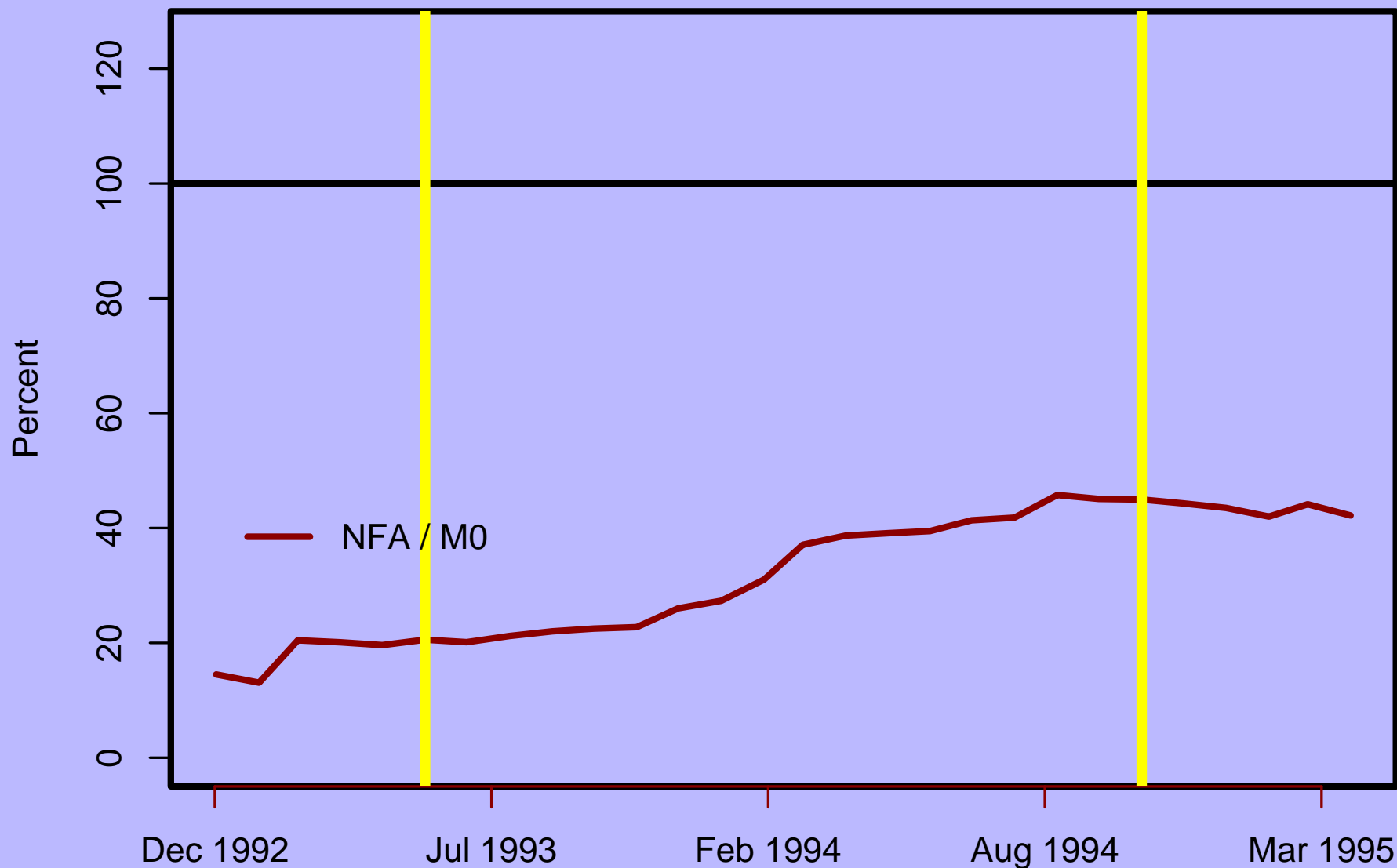
Sequence of events in Episode I



Sequence of events in Episode I



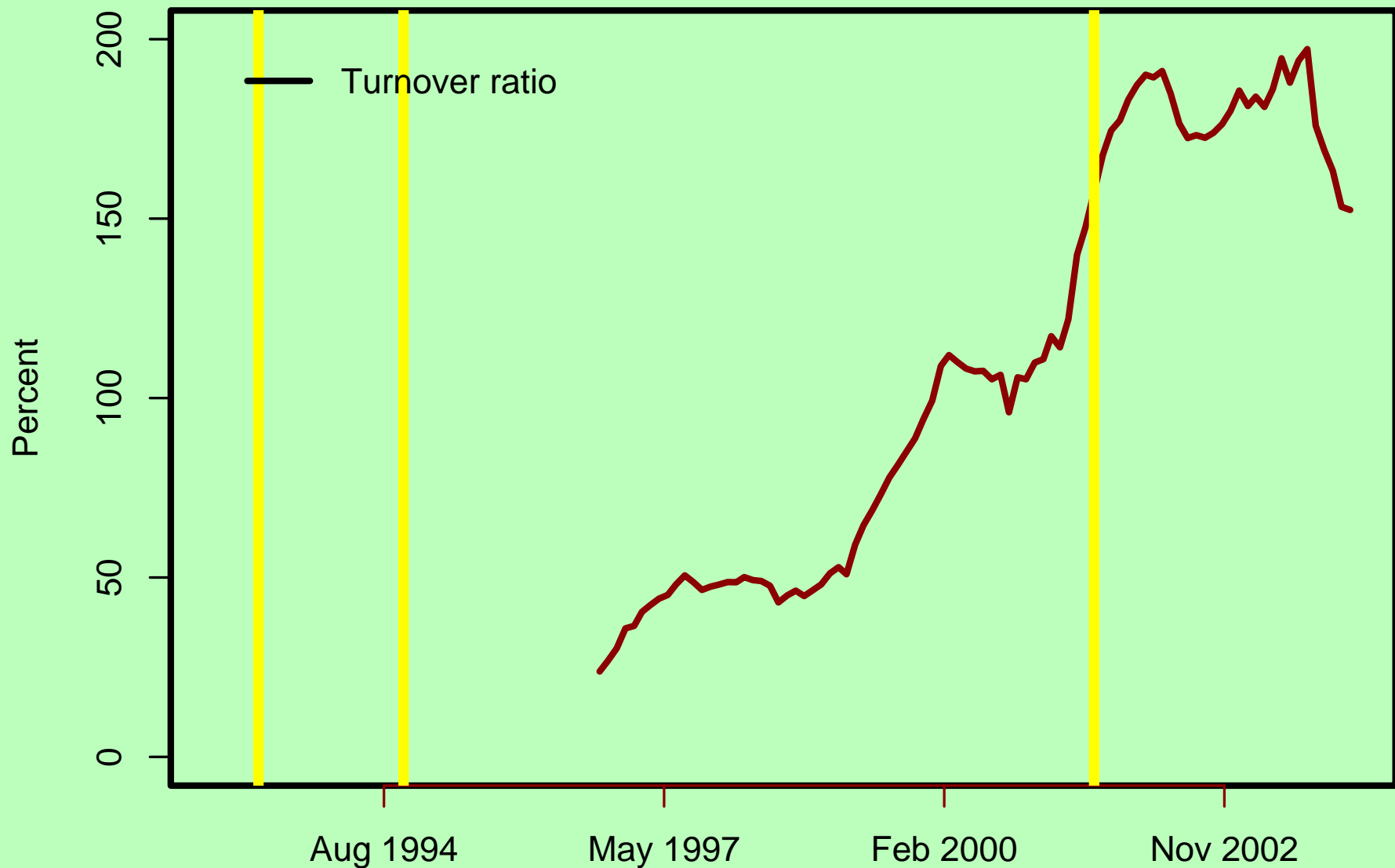
Currency trading compared with M_0



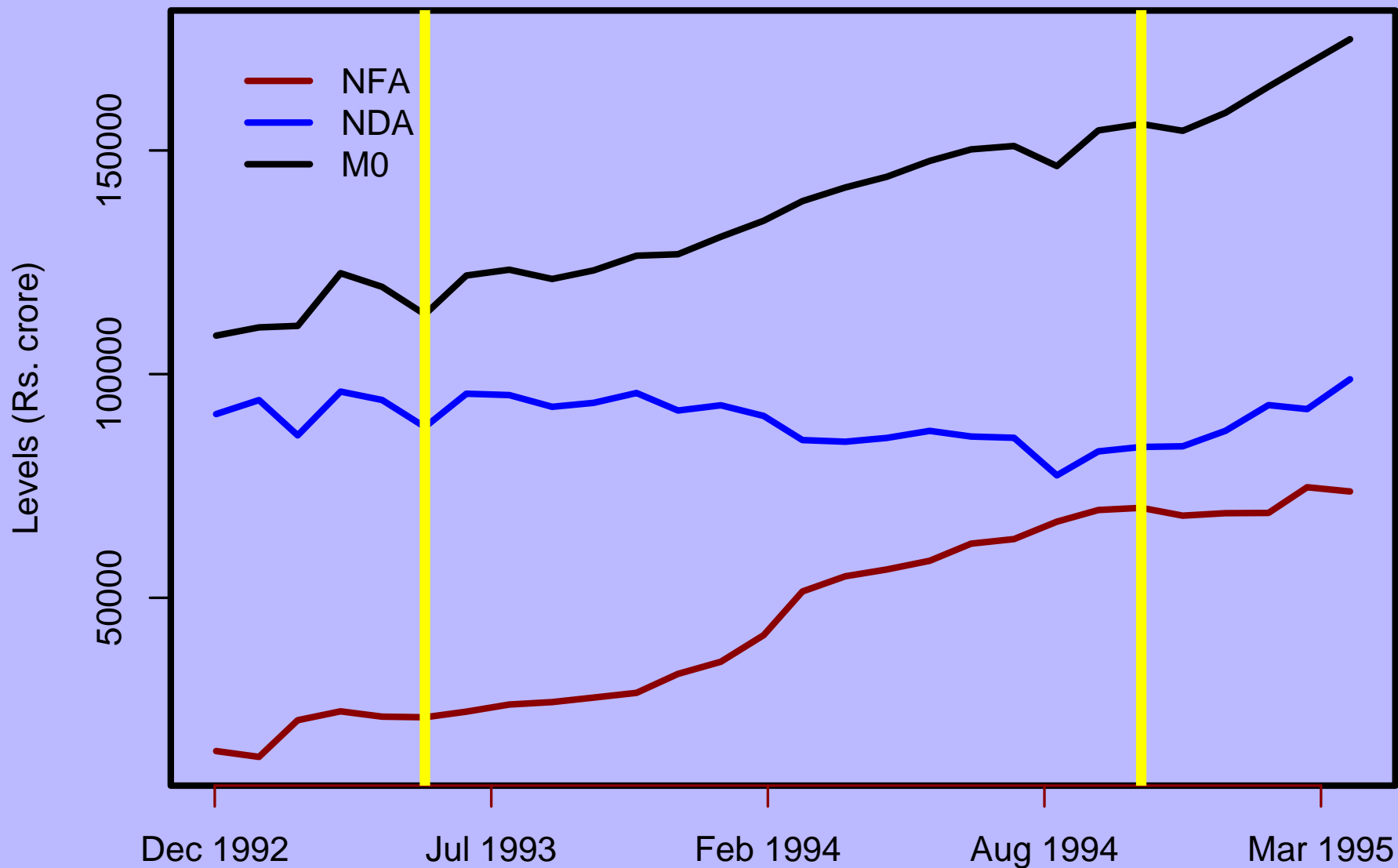
Open market operations?

Data prior to January 1995 has not been published.

Limitations to OMO



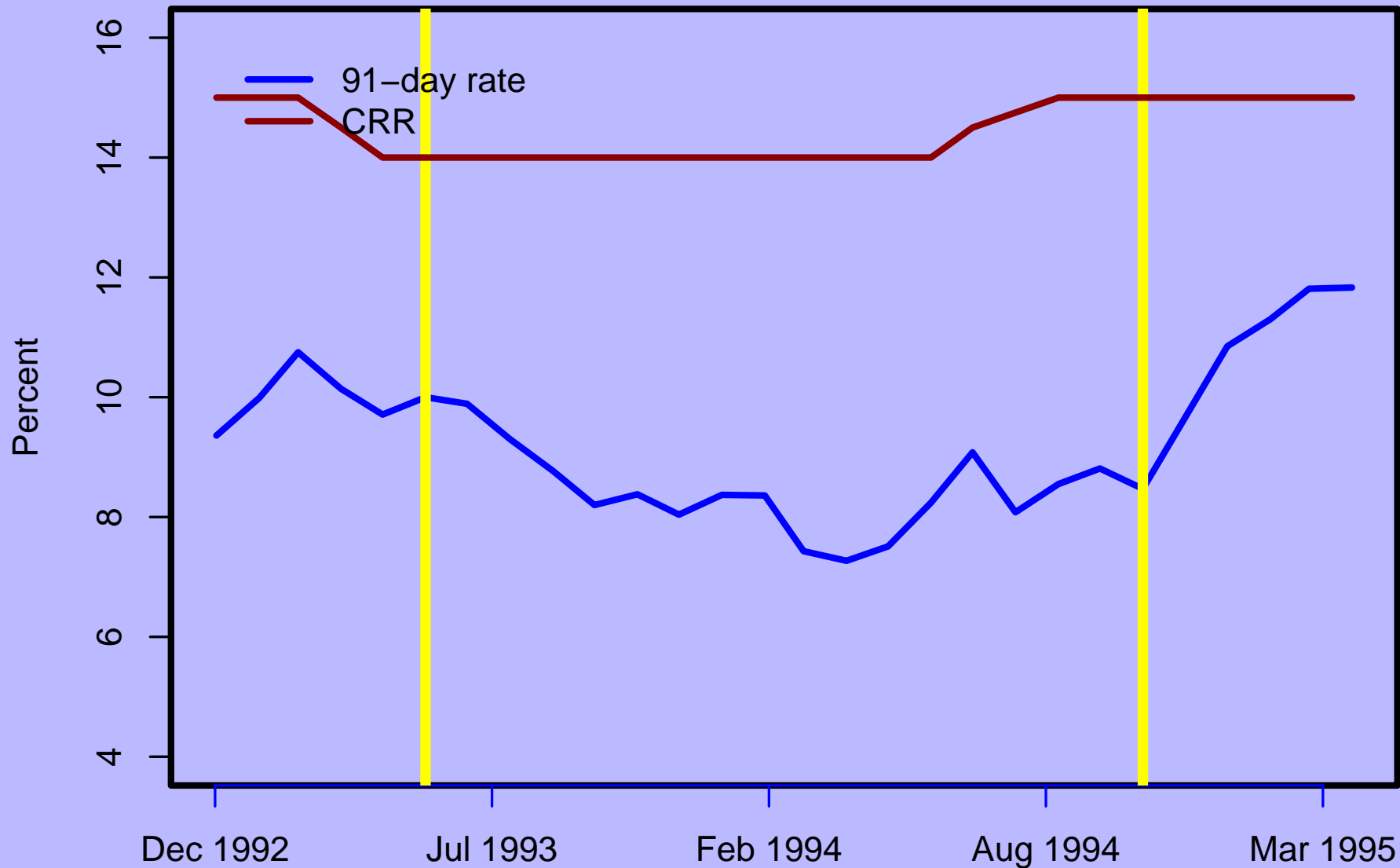
Time-series of NFA and NDA



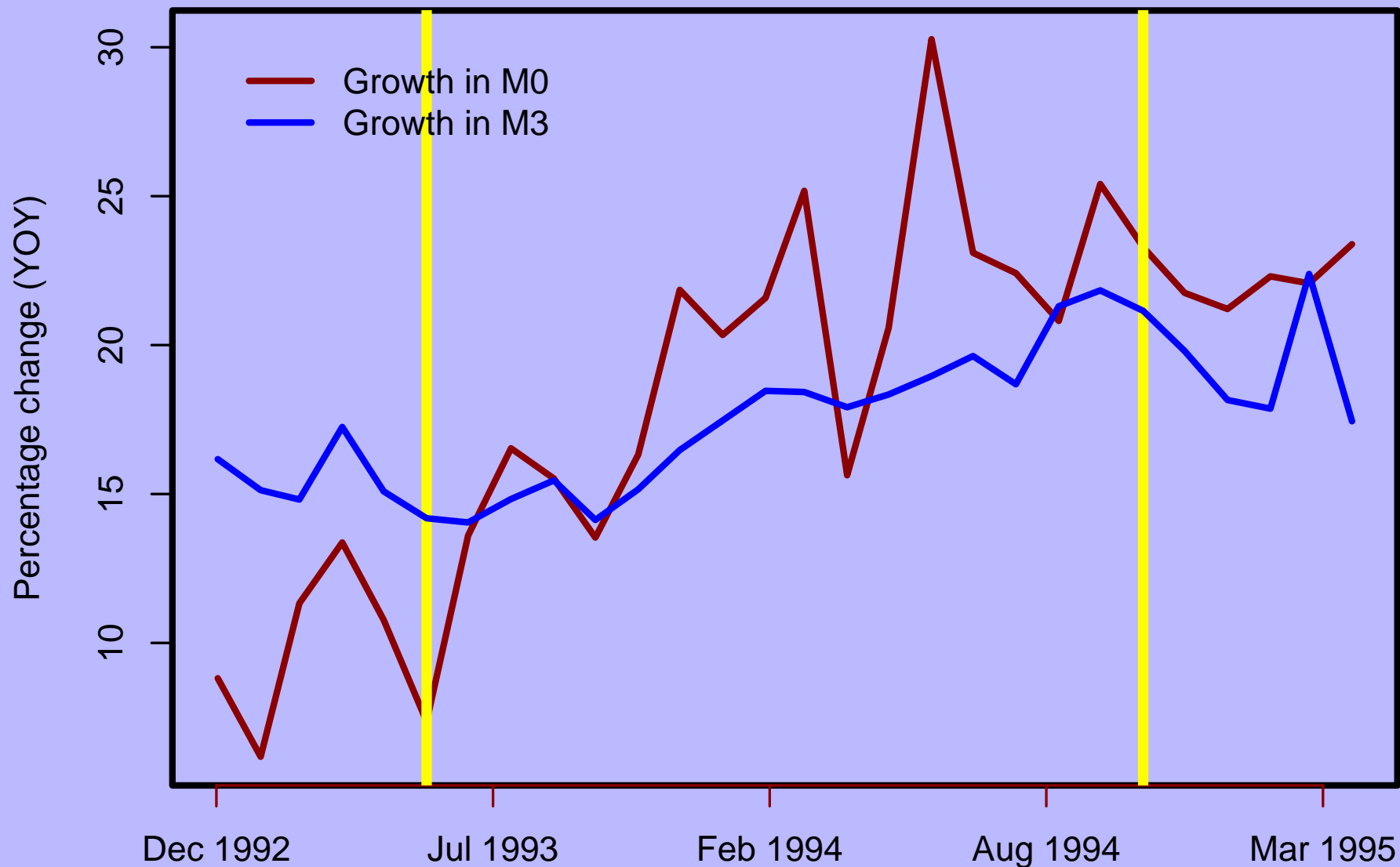
Lever: Banking reserve requirements

| Date | Action |
|-------------|---|
| 11-Jun-1994 | Cash Reserve Ratio (CRR) was raised from 14% to 14.5%. |
| 09-Jul-1994 | CRR was raised to 14.75%. |
| 06-Aug-1994 | CRR was raised to 15%. |
| 29-Oct-1994 | CRR for Foreign Currency Non-Resident (FCNR) Accounts was raised from 0% to 7.5%. |
| 21-Jan-1995 | CRR for Non-Resident accounts raised from 0% to 7.5%, and CRR for FCNR accounts was raised to 15%. |
| 17-Jul-1995 | Conditions for overdraft facility to stock brokers to draw money from banks were made more stringent. |

Monetary tightening



Overall impact on M_0 and M_3



Summarising Episode I

1. Began as a surge in capital inflows.
2. NFA as percent of M0 went up from 20% to 45%.
3. NDA growth slowed, and reserve requirements were used.
4. Yet M_3 growth did accelerate.
5. Monetary tightening started in month 12, and impacted interest rates well beyond.

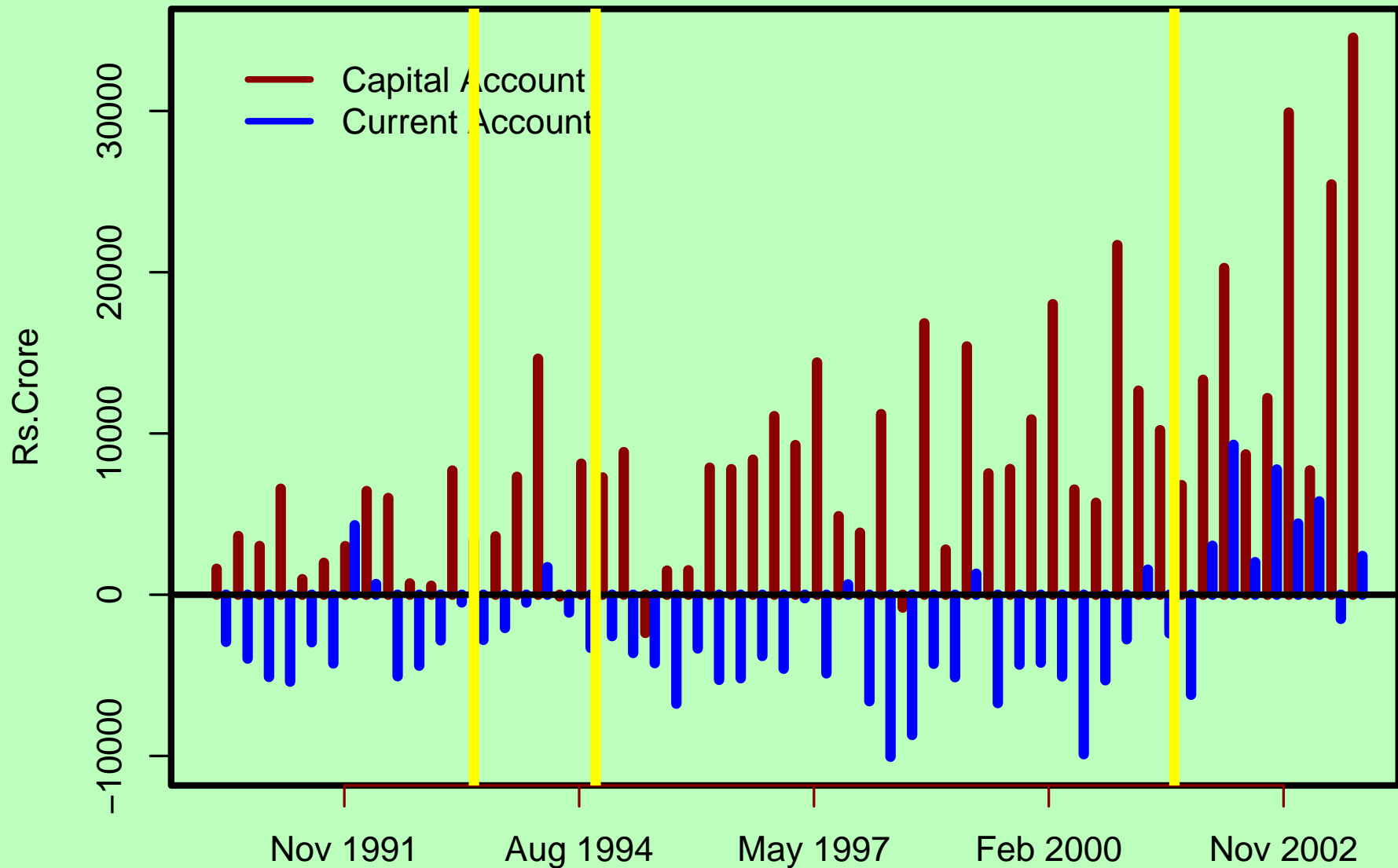
Episode II

Initiation

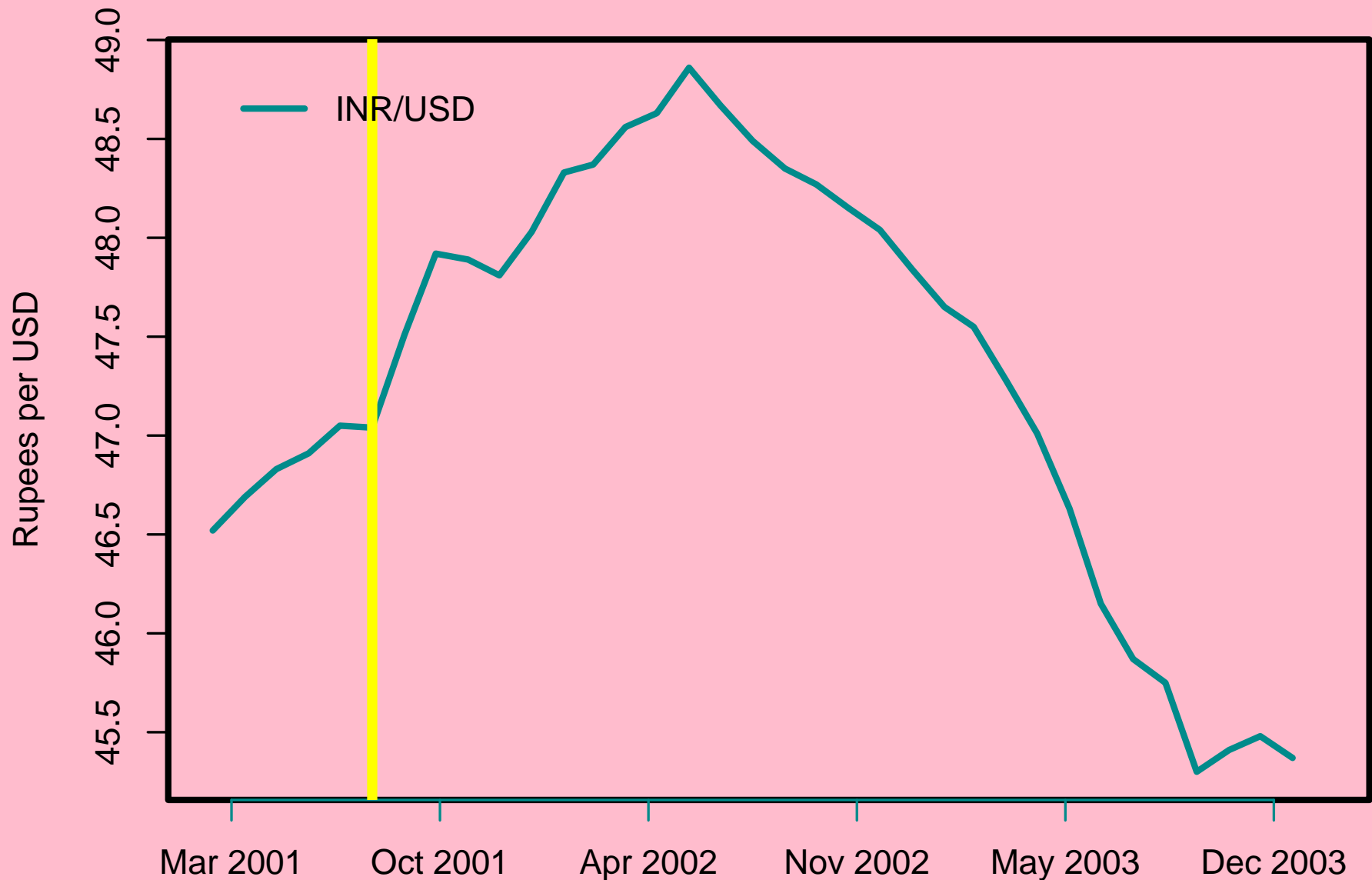
(Billion USD)

| | Current account balance | Net capital Inflows | Change in Reserves |
|---------|----------------------------|------------------------|-----------------------|
| 1999-00 | -4.7 | 10.2 | +5.5 |
| 2000-01 | -2.6 | 9.0 | +4.3 |
| 2001-02 | +1.4 | 9.5 | +11.8 |
| 2002-03 | +3.7 | 13.3 | +21.3 |
| 2003-04 | | | +36 |

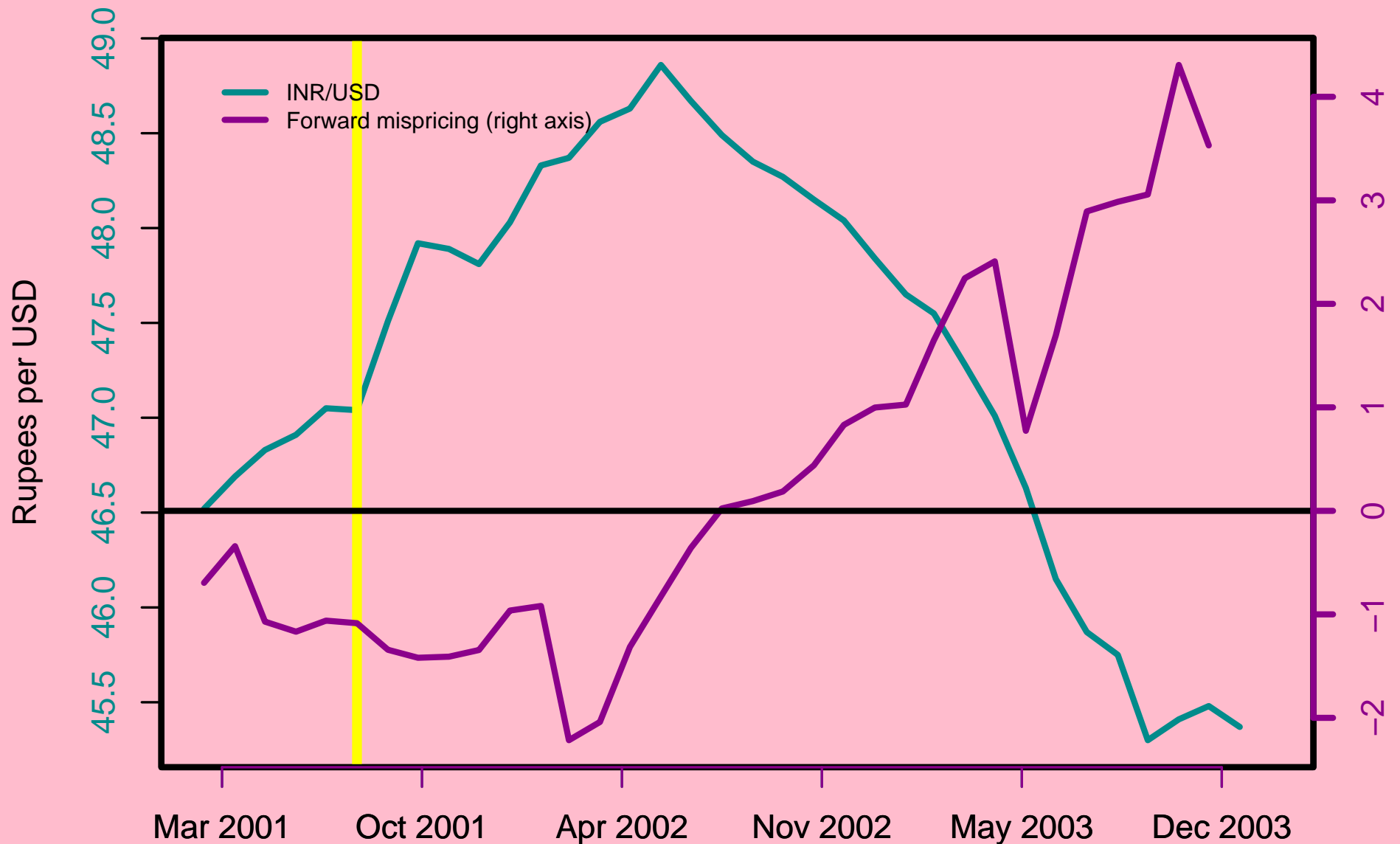
Episode I versus II



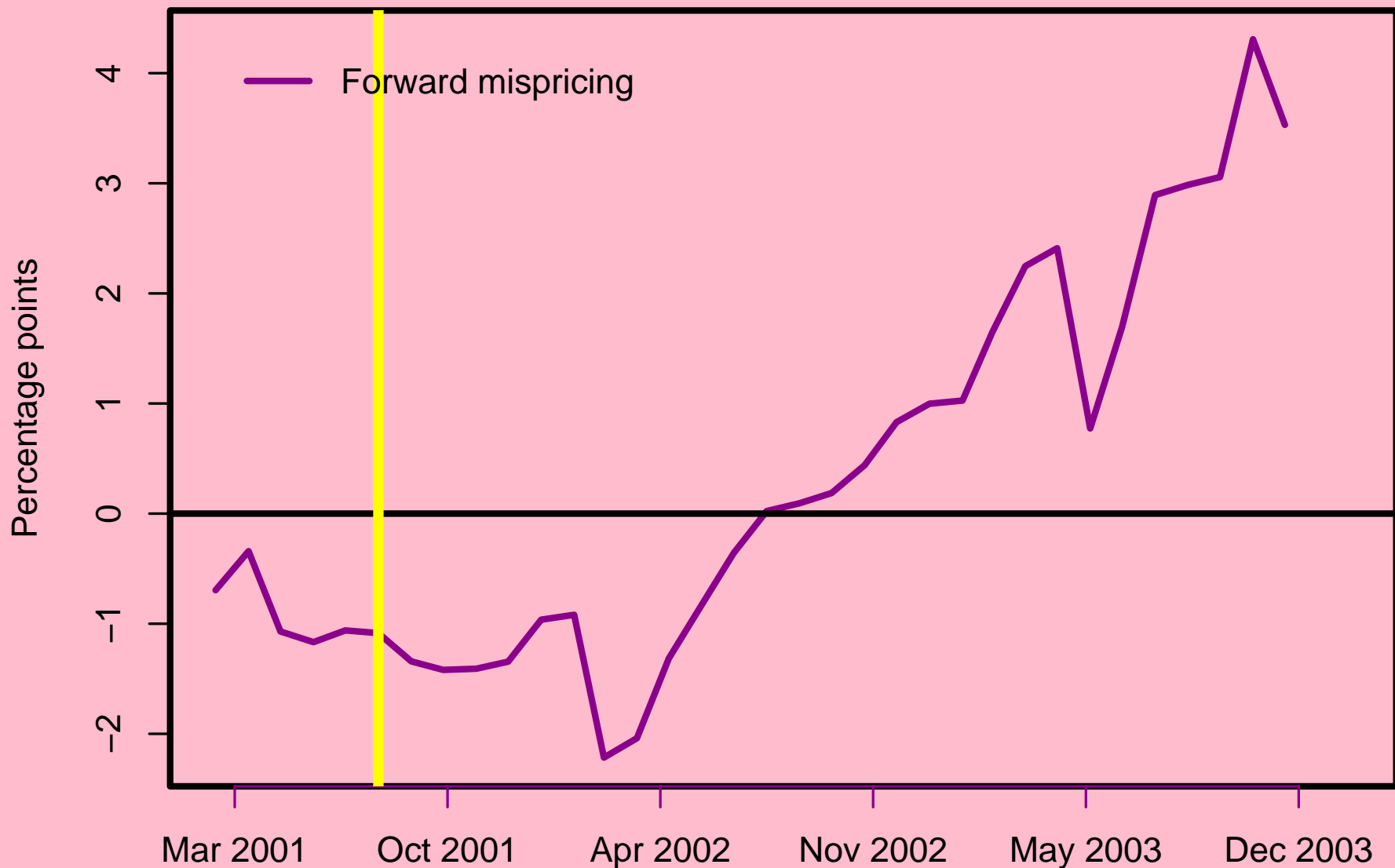
Sequence of events in Episode II



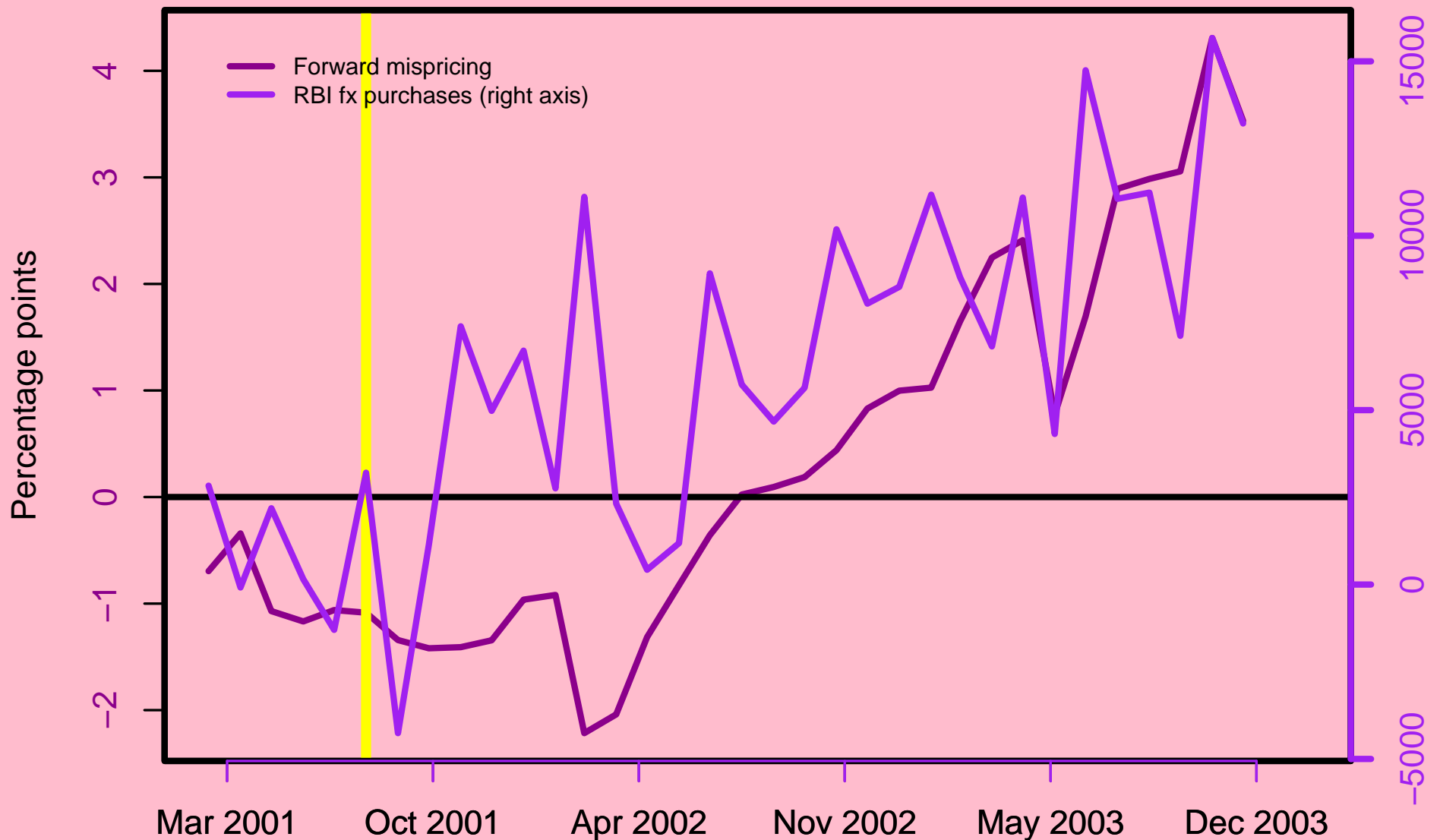
Sequence of events in Episode II



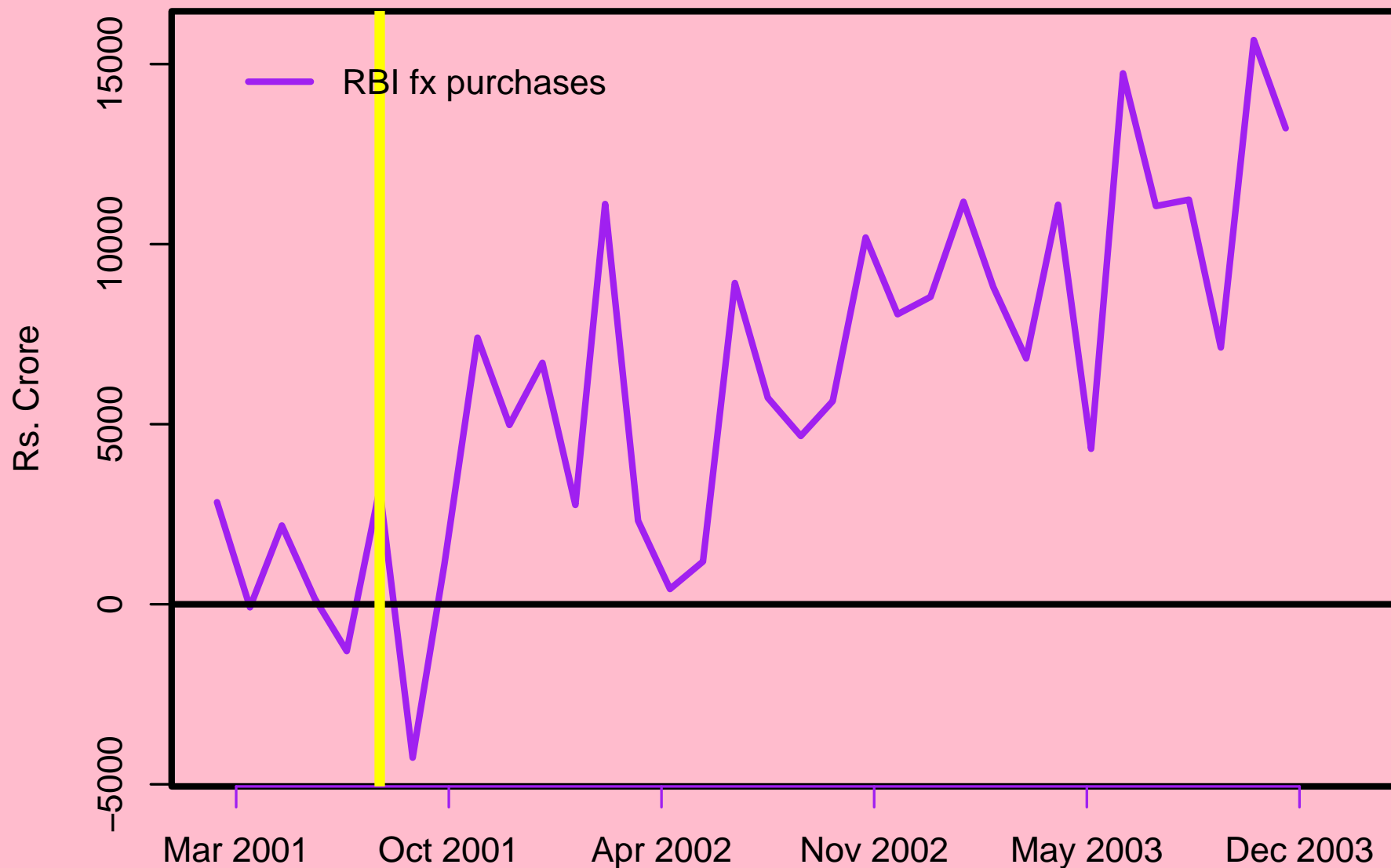
Sequence of events in Episode II



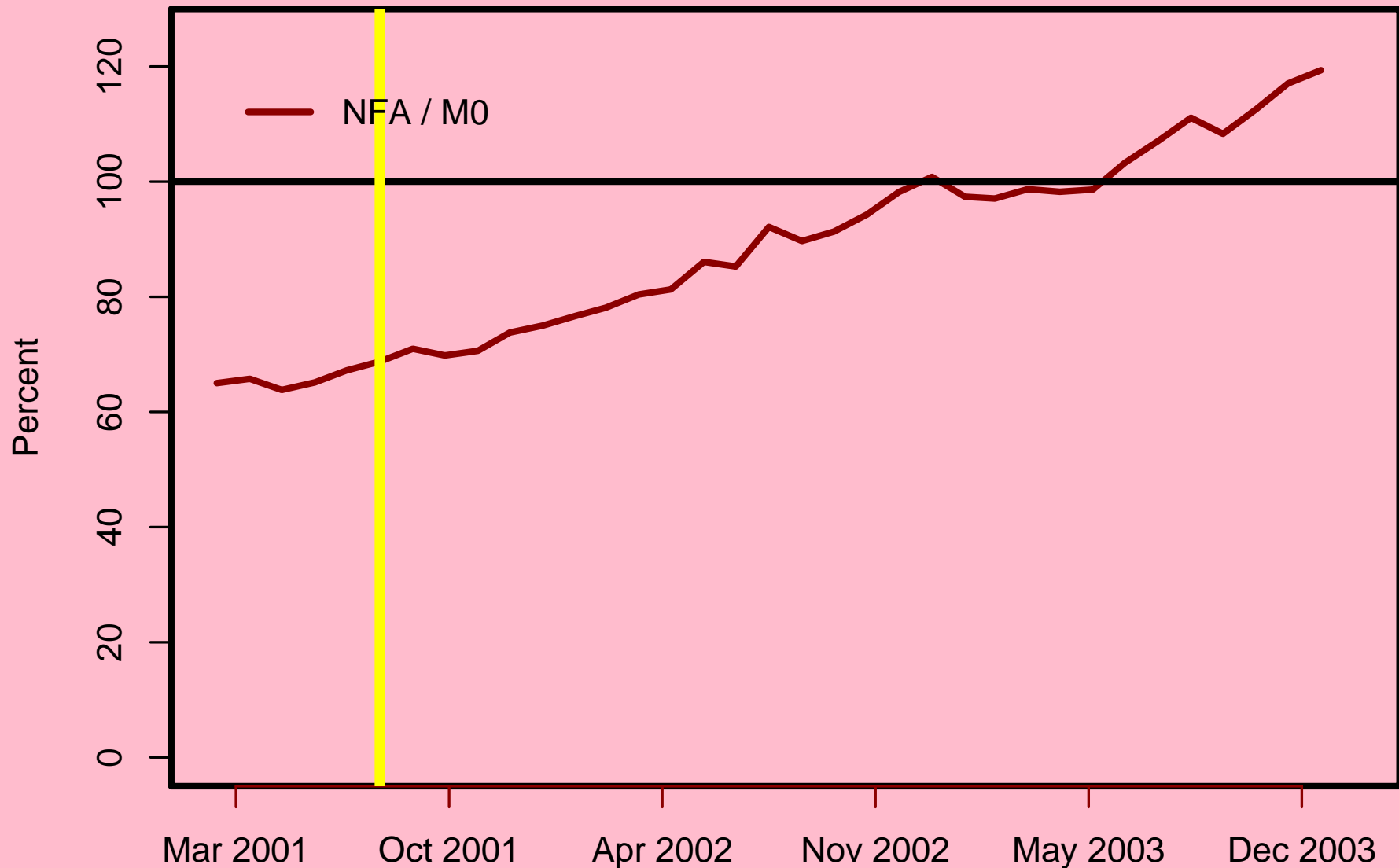
Sequence of events in Episode II



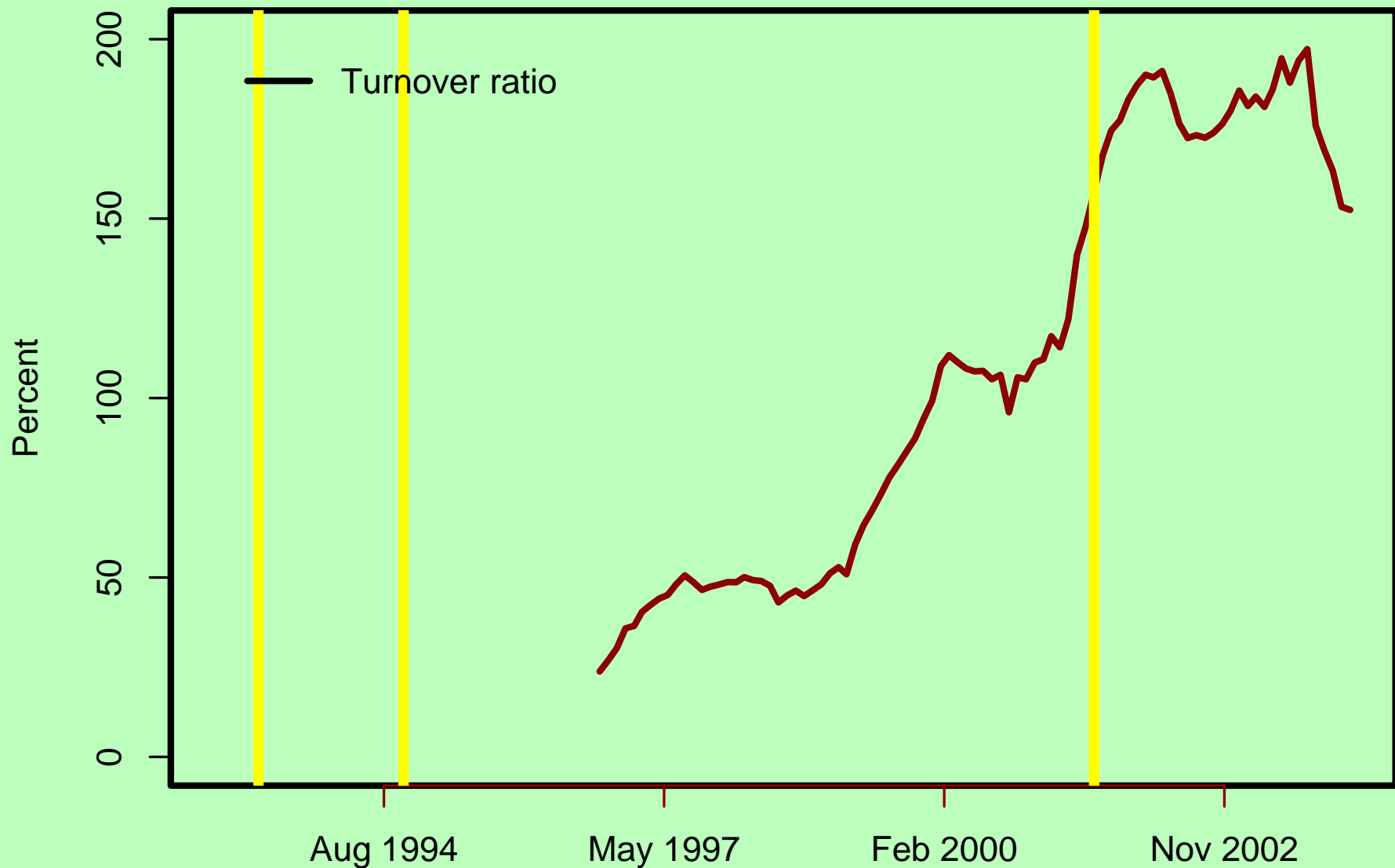
Sequence of events in Episode II



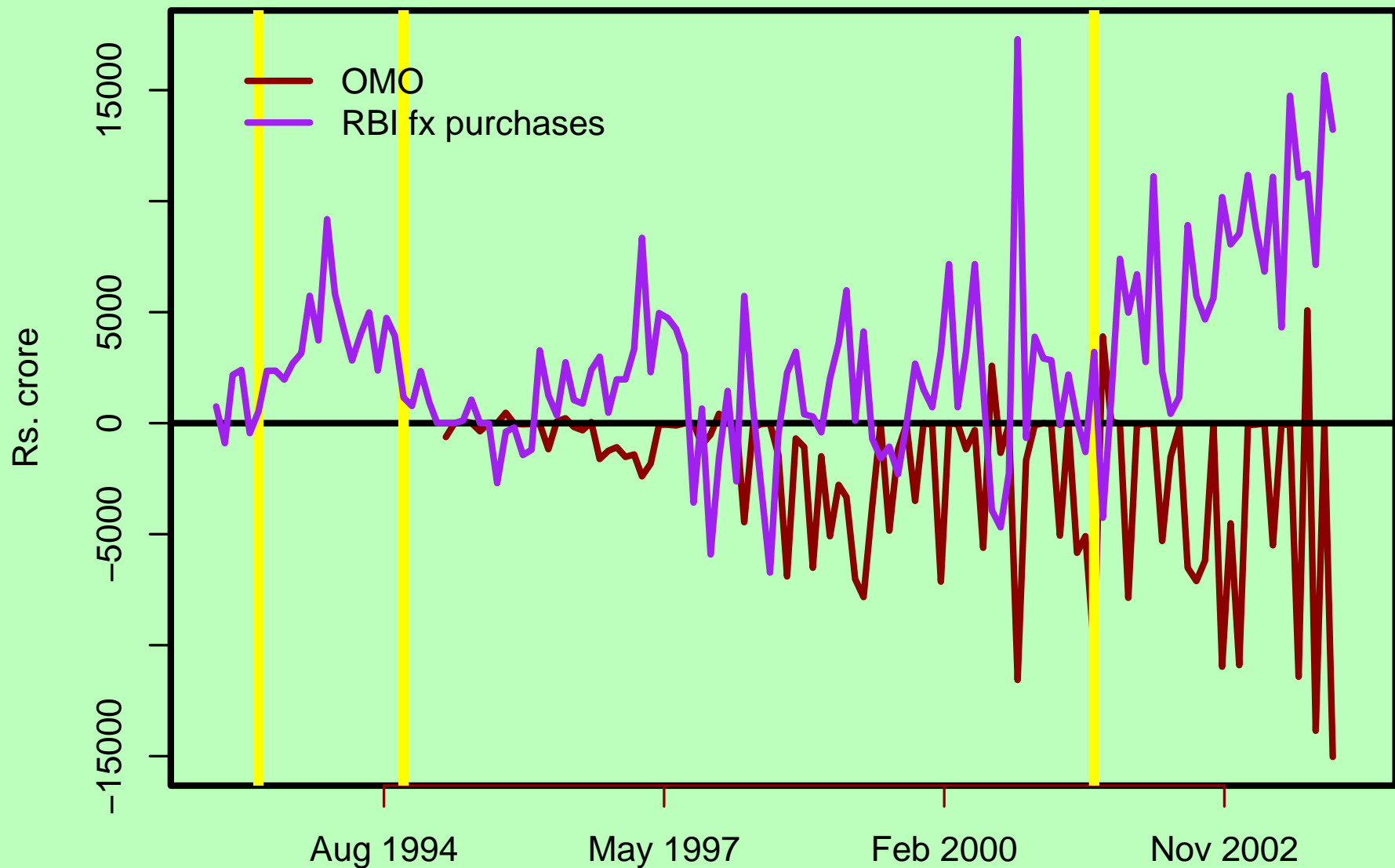
Currency trading compared with M_0



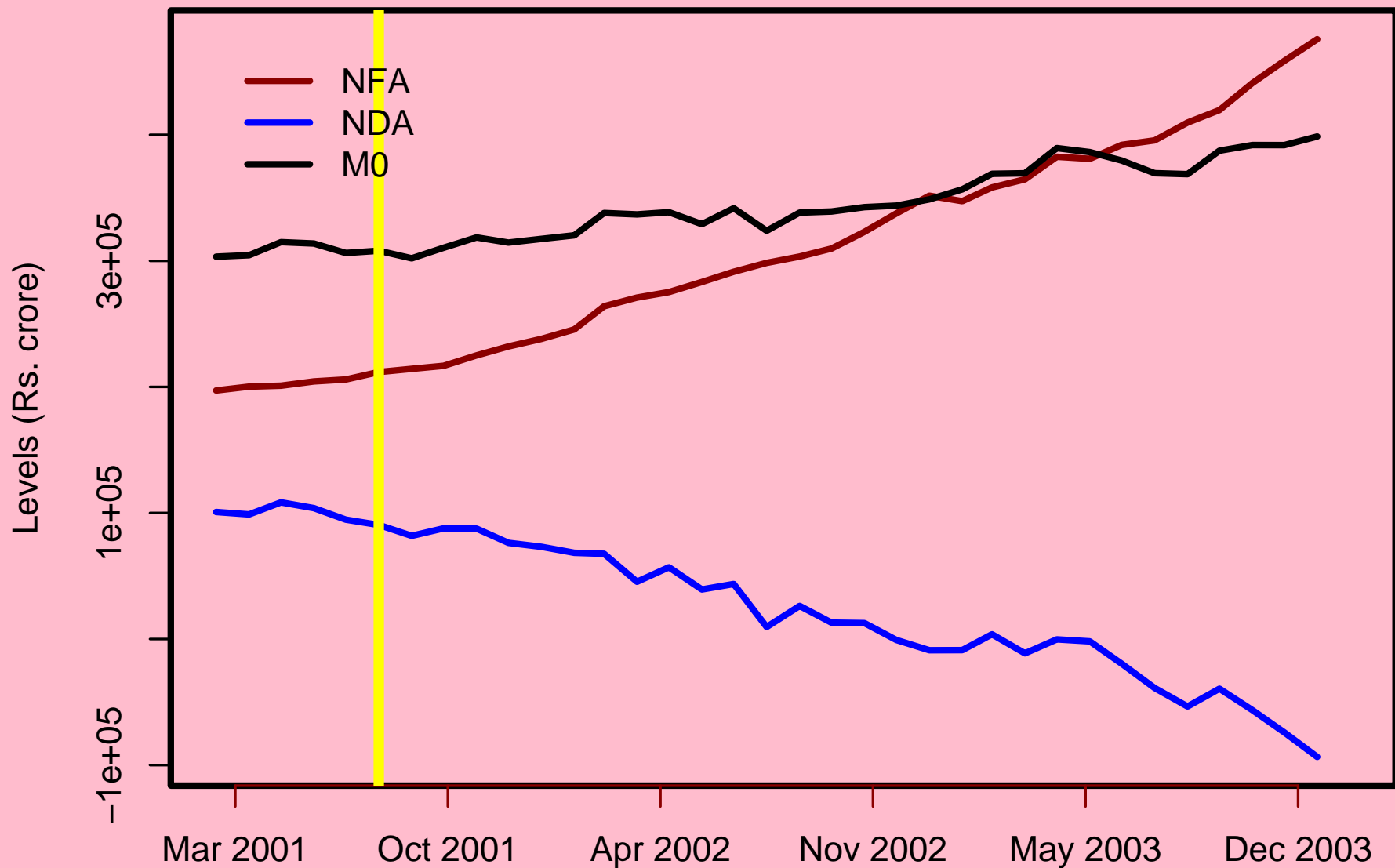
Feasibility of OMO



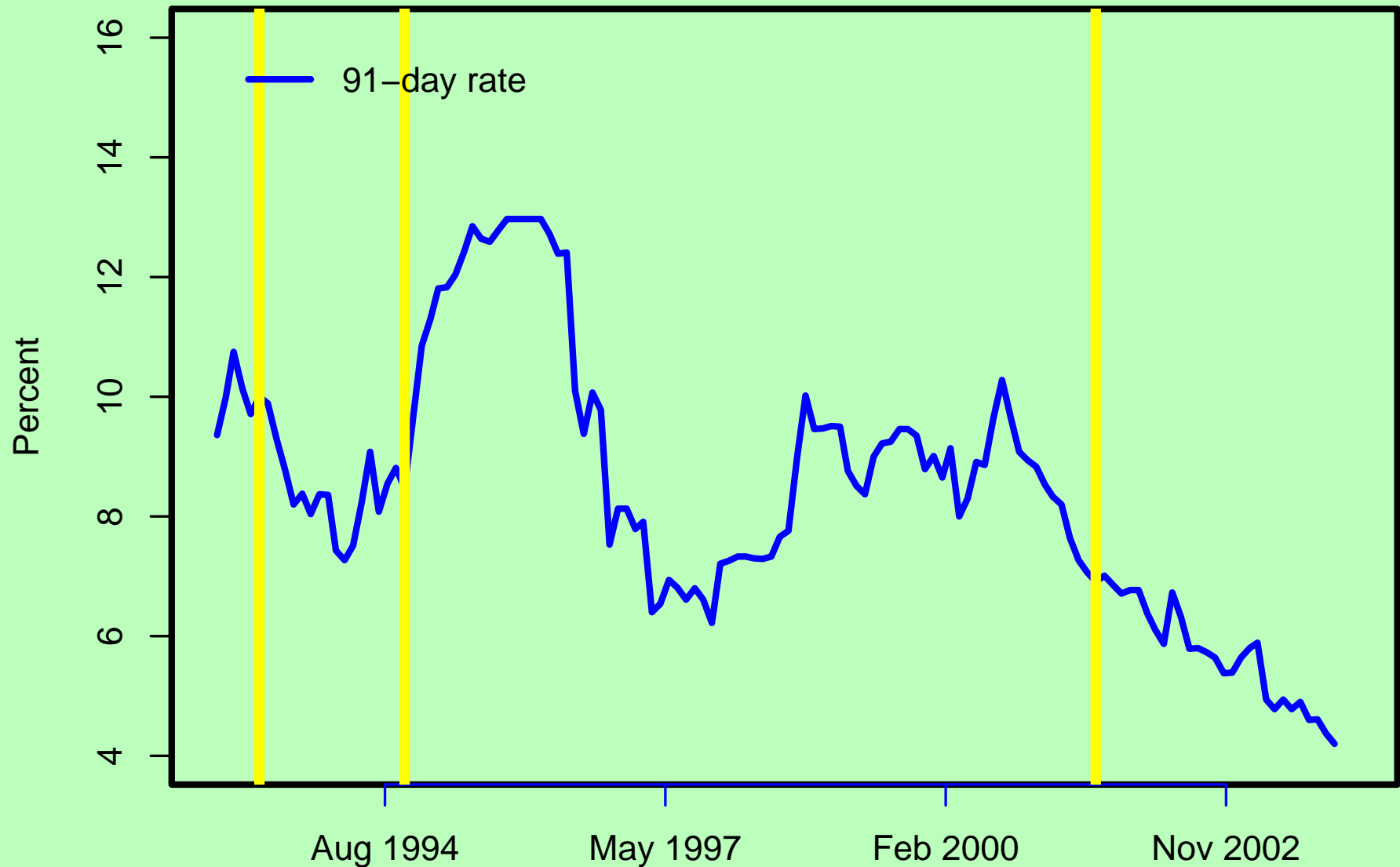
OMO versus currency trading



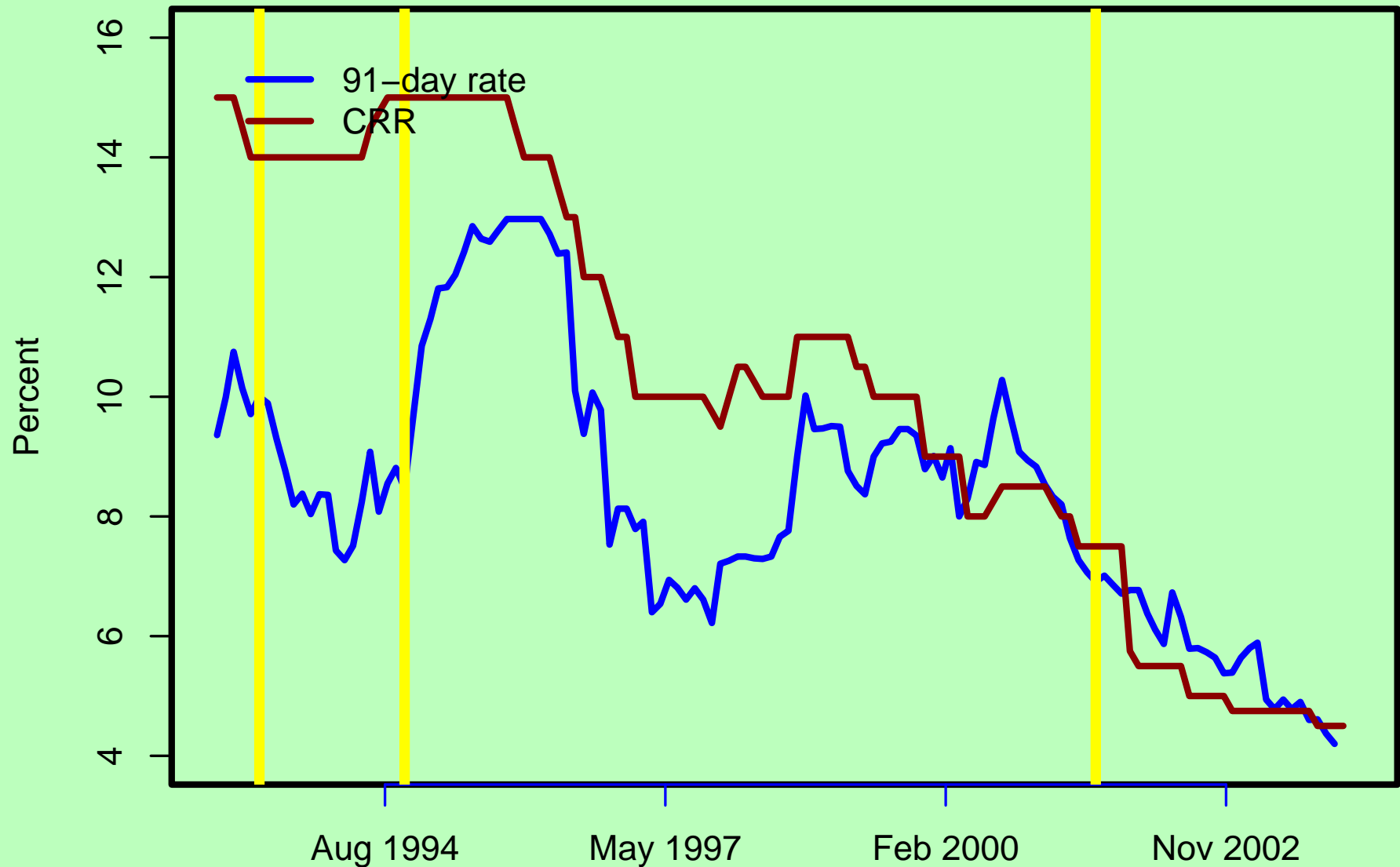
Time-series of NFA and NDA



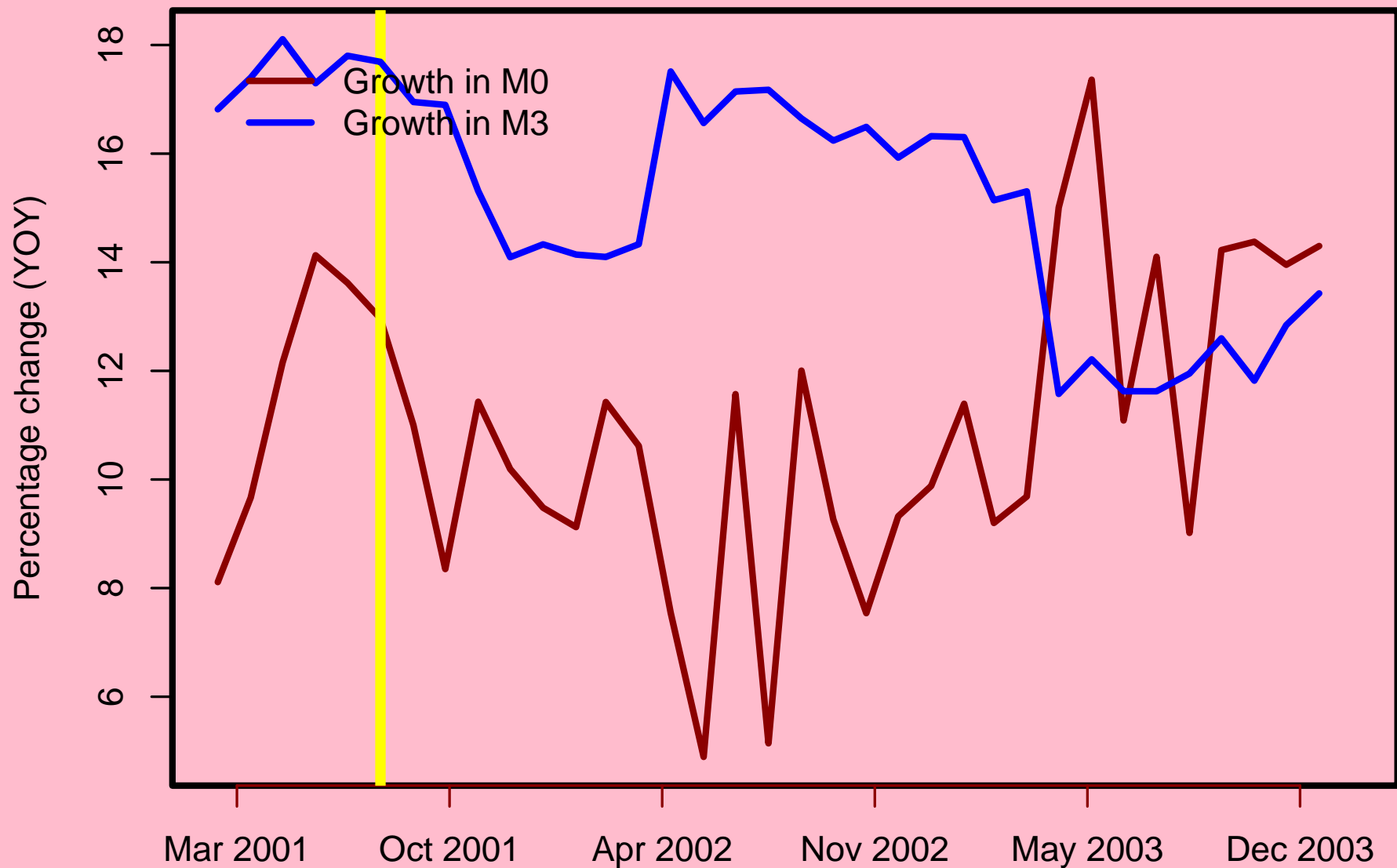
Impact on interest rates



Impact on interest rates



Overall impact on M_0 and M_3



Summarising the first 3 years of Episode II

1. Began as a surge in the current account
2. After 6/2002, currency appreciation commenced, forward market forecasted appreciation, and capital surge commenced.
3. NFA as percent of M_0 went up from 70% to 120%.
4. The bond market was actively used for OMO.
5. CRR phaseout program stayed on course; M_3/M_0 kept rising.
6. M_0 and M_3 growth did not accelerate.

VI. Comparing Episode I and Episode II

Episode II appears more benign

| | I | II (thus far) |
|------------------------|------------------|-------------------------------------|
| Initiation | Capital account | Current account |
| Currency vol | Mostly fixed | Slight appreciation |
| Forward market | Expected apprec. | Expected apprec. from 7/02 onwards. |
| NFA to M_0 | 21% → 45% | 70% → 120% |
| CRR phaseout | Abandoned | Unaffected |
| Bond market | Weak | Much improved |
| Use of OMO | N.A. | Strongly visible. |
| M_0 and M_3 growth | Accelerated | Unaffected |

But

- Episode I ended in 1.5 years! Episode II has not ended yet.
- The current account stayed negative in Episode I; but it turned positive in Episode II, adding to dollar inflows.
- Attempts at reverting to some capital controls on external borrowing were overturned.
- RBI will soon run out of bonds for OMO. 'Market Stabilisation Bond' plan.
- RBI says the use of banking reserve requirements as an instrument for sterilisation should not be ruled out.

Conclusion

- The current account + private flows on the capital account add up to roughly 55% of GDP.
- Direct sterilisation is used by RBI to offset roughly 75% of the rise in NFA.
- India's currency peg has significantly attenuated monetary policy.

Conclusion

- Private gross flows on the current and capital account at over 50 per cent of GDP.
- Direct sterilisation through OMO appears to be the least distortionary.

Thank you