

Thailand's Exchange Rate Policy: lessons from the past

Bhanupong

Lecture 22

Chapter 7: Exchange rate policy

Strong baht battering rice shipments

Bangkok Post: 23 September 2019



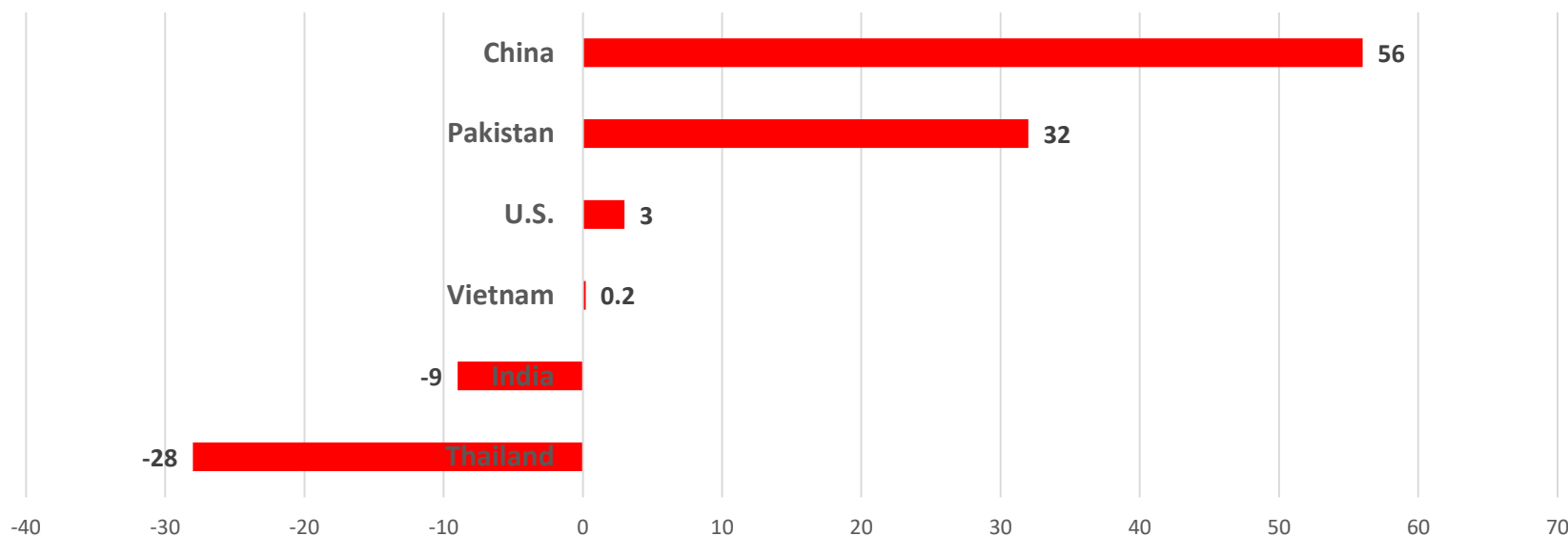
As Thailand's Baht Surges, *Rice Farmers Feel the Pain*

November 2, 2019

- The free-on-board prices of Thai 5% white rice are quoted at US\$400 a ton, while those of Vietnamese rice are quoted at \$320 a tone (20% cheaper).
- According to the latest report by the Commerce Ministry, Thailand's rice exports in the first eight months fell by 26.3% to 5.3 million tons. Export value slid 22% to \$2.87 billion.
- Given the strong baht, we expect buyers like the Philippines, Indonesia and Malaysia to switch to buying rice from Vietnam instead of Thailand.
- Key threats to Thai rice exports include the strong baht and lower purchase demand from China, which holds hefty rice stocks.



Rice export volumes
Jan-Sep 2019: (% y-o-y)



Big Stash

Thai reserves have reached an unprecedented level



Source: Bloomberg

Course Syllabus

Lecture 22

- **Exchange rate policy, capital controls, and the baht appreciation**
- To what extent export growth depends on weak currency?
- Intervention in the foreign exchange markets is ineffective because the dollar and short-term capital flow into asset markets dictate the baht external value.

Key words

1. The real exchange rate
2. The Dutch Disease
3. The Monetary Approach to B/P
4. Implications of a flexible exchange rate regime
5. Fear of appreciation
6. Currency manipulators in 2019

1. Two Definitions of the Real Exchange Rate (RER)

The 1st definition:

Nominal Exchange Rate (ER)

Real Exchange Rate (RER)

$$ER = \frac{B}{\$}$$

$$RER = \frac{B / P^T}{\$ / P^U}$$

$$RER = e\left(\frac{P^U}{P^T}\right)$$

The real exchange rate (e^*) depends on the nominal rate and the price ratio between the US and Thailand's price levels

Real exchange rate (e^*) is the Nominal Exchange Rate (e) adjusted by price ratio between foreign price and domestic (P^*/P): $e^* = e(P^*/P)$

Gain in competitiveness

Thailand's inflation must be lower than the U.S.

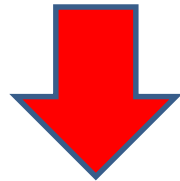
Depreciation

If $\Delta P_T < \Delta P_{US}$



RER

When nominal exchange rate (e) is fixed



If $\Delta P_T > \Delta P_{US}$

Appreciation

Loss of competitiveness

If Thailand inflation is higher than the U.S.

Effective Exchange Rates: A weighted average of bilateral exchange rates between the baht and other currencies

Nominal and Real Effective Exchange rates:
NEER vs REER

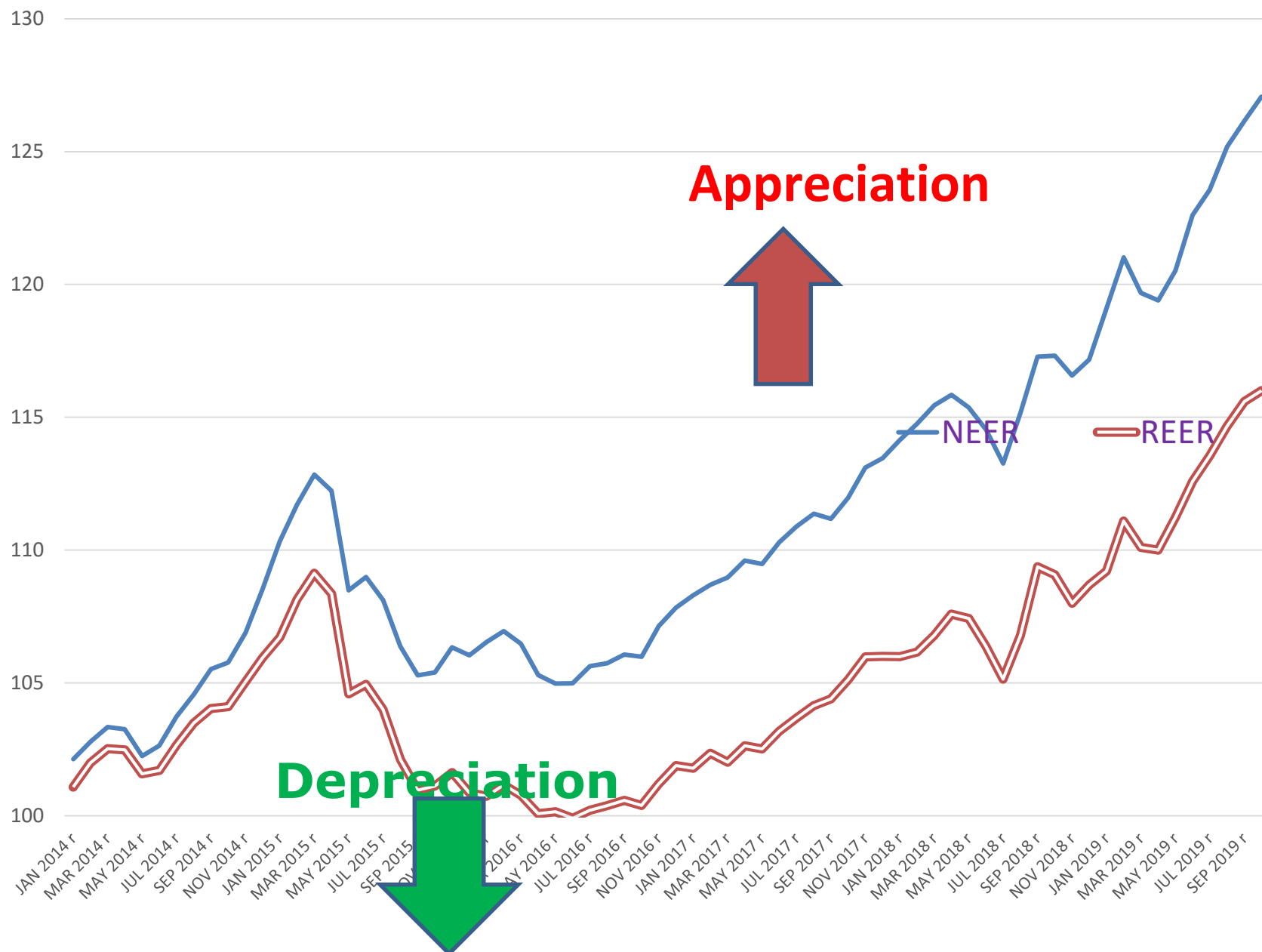
$$EER = \theta_1(B / \$) + \theta_2(B / Y) + \theta_3(B / Euro) + \theta_4(B / S) + ..$$

$$REER = \theta_1(B / \$) \left(\frac{P^U}{P^T} \right) + \theta_2(B / Y) \left(\frac{P^Y}{P^T} \right) + \theta_3(B / Euro) \left(\frac{P^{EU}}{P^T} \right)$$

$$+ \theta_4(B / S) \left(\frac{P^S}{P^T} \right) + ...$$

+ RMB

Baht effective exchange rate Index



The fixed exchange rate system before the 1997 crisis

- **Volatility** in exchange rates creates risks and uncertainties in trade and investment.
- The **fixed rate** may have promoted trade and investment in the short run because a fixed exchange rate regime creates **an illusion of a zero-exchange rate risk**.
- Premature relaxation of capital controls encouraged **over-borrowing** in foreign currencies due to the absence of exchange rate risks.
- **Currency and maturity mismatching** of Thai commercial banks widened exposure to external shocks.

Capital inflows before the 1997 crisis

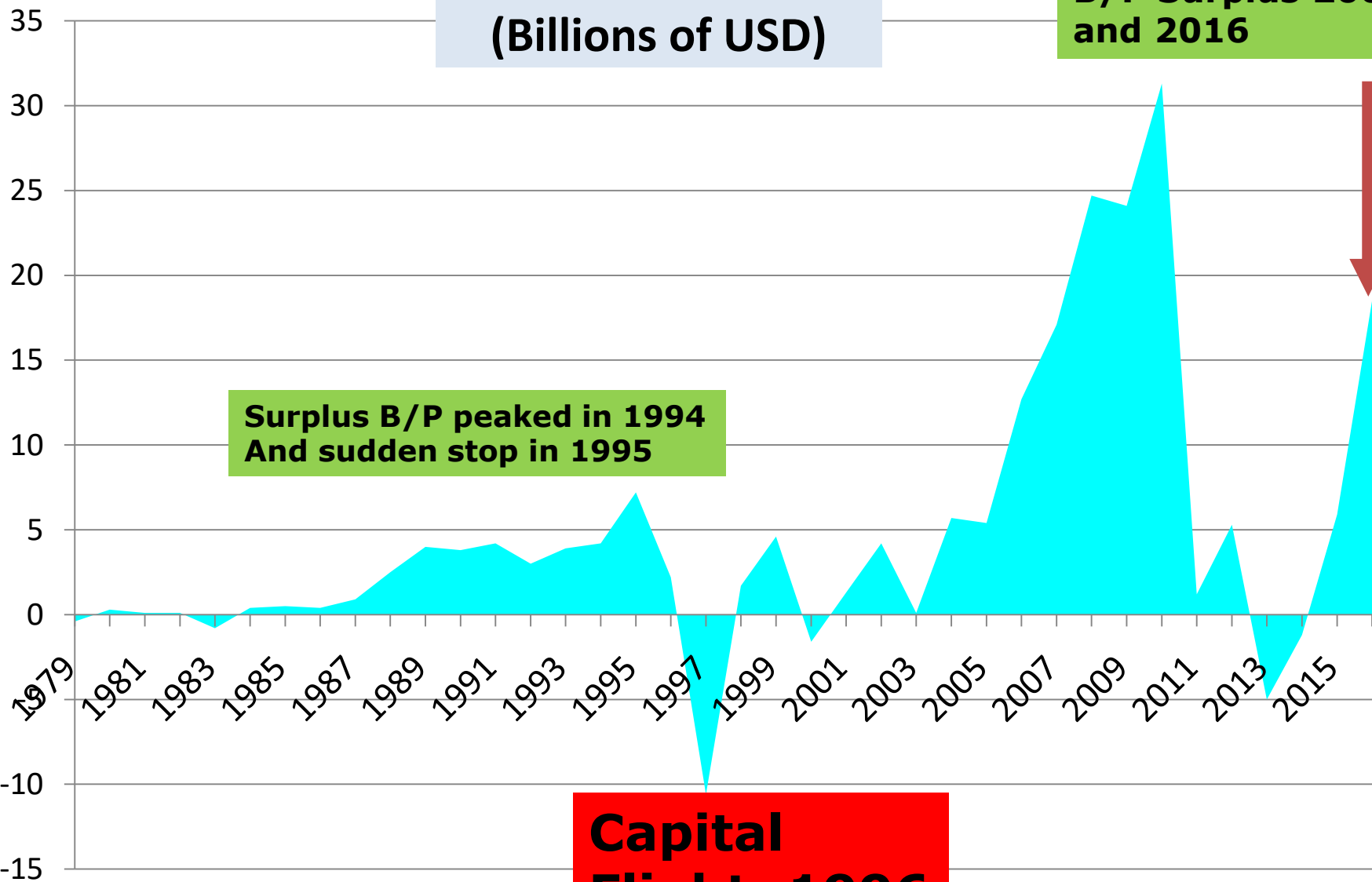
- *A surge in capital inflows into Thailand began in the late 1980s and continued unabated until 1996.*
- *The flows brought high economic growth and a surplus balance of payments and current account deficit.*
- *Why did Thailand experience deficit current account?*

**Balance of payments
(Billions of USD)**

**Sudden Surges in
B/P Surplus 2009
and 2016**

**Surplus B/P peaked in 1994
And sudden stop in 1995**

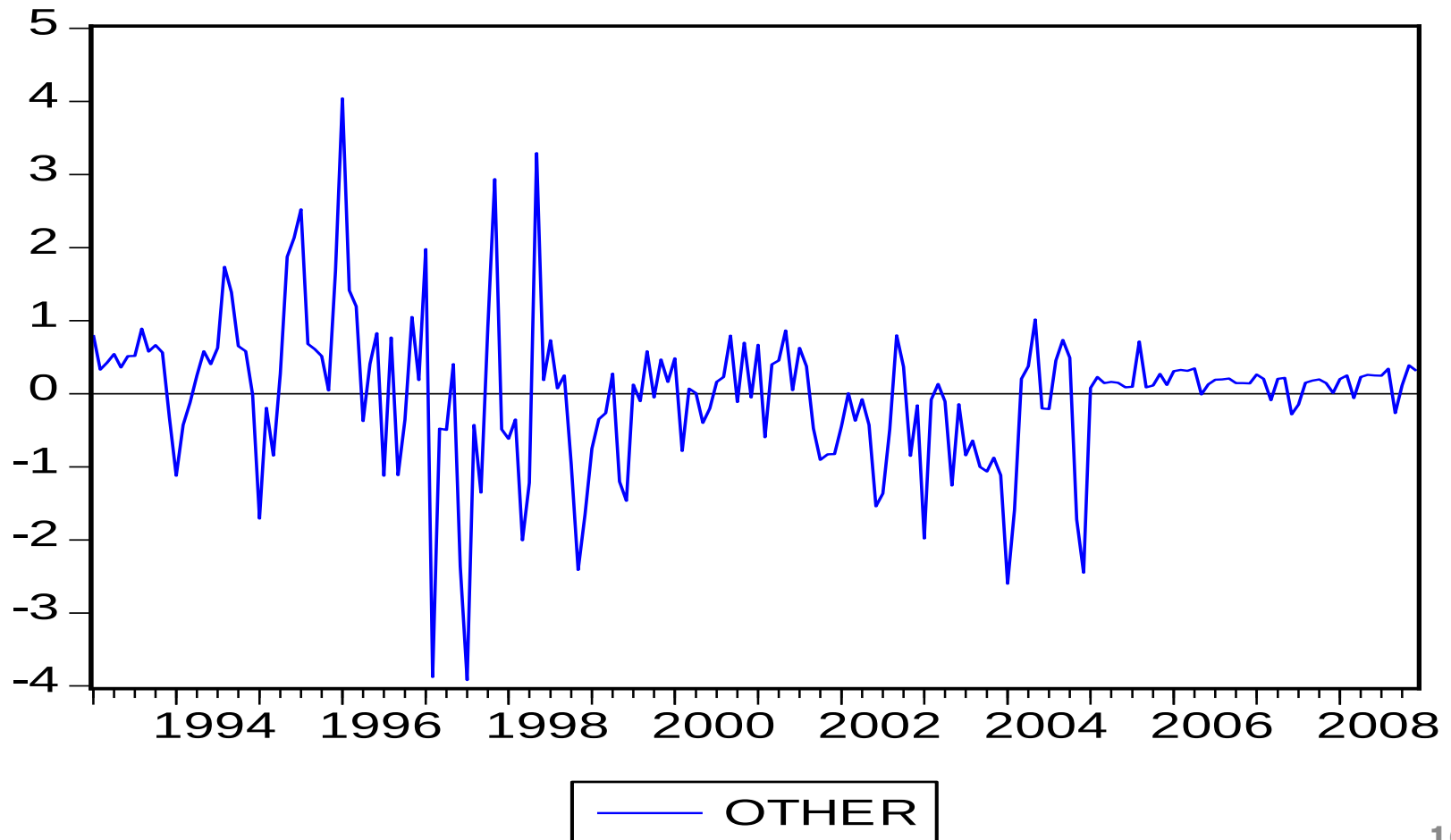
**Capital
Flight: 1996**



Causes of rapid capital inflows: push and pull factors

- A declining in world interest rates *widened the interest rate differentials*, inducing excessive foreign borrowings (*push factor*)
- Domestic financial liberalization increased the *sensitivity* of capital flows to interest rate differential.
- How do we measure that sensitivity?
- The measures are undertaken to establish Thailand as a regional financial sector induced short-term capital flows through offshore borrowings by the nonbank private sector.
- Recall *push factors* vs. *pull factors*.

Speculative capital flows (OTHER) died off after a realistic exchange rate was established in the aftermath of the AFC



Determinants of capital inflows: The fundamental equation

$$K_f = \alpha + \beta(r - r_f) + \delta (\Delta Y / Y) - \phi(Risk) - \eta(\Delta e / e)^E + \varepsilon$$

**The important role of exchange rate expectations:
Capital flight can be stopped when
there is no further anticipation of devaluation**

**Maintaining high interest rates does not guarantee
the absence of capital flights. *Why?***

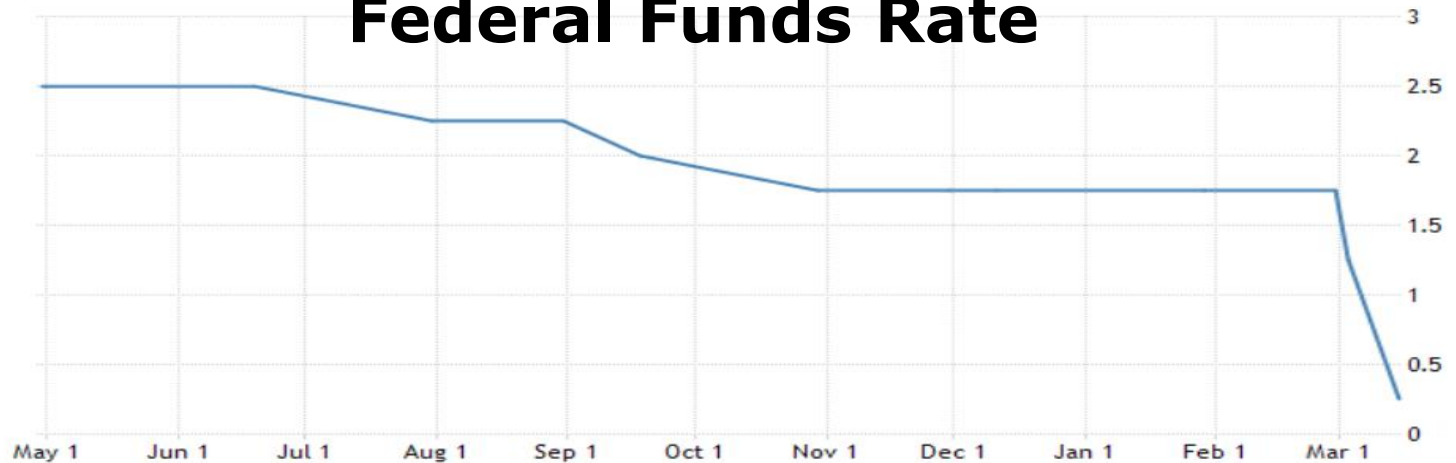
**Key rate held steady
to preserve policy room
April 8, 2020.**

- That decision followed a 25 basis point rate cut at a special meeting on March 20 as policymakers sought to cushion the economy from the widening fallout of the pandemic.
- The Bank of Thailand's monetary policy committee (MPC) voted 4-2 at that meeting to keep the one-day repurchase rate at a record low of 0.75%, with the two dissenters favoring 25 basis-point cut.

BoT key policy rate



Federal Funds Rate



Covid-19 cause a swing from negative to positive gap

2. Dutch disease

Adverse consequences of capital inflows

- The surge in capital flows led to the so-called “Dutch disease” which results in the appreciation of the real exchange rate and a consequent reduction in external competitiveness.
- In the Dutch disease, the current account deficit **worsens** since the price of non-traded goods rises faster than that of traded goods:
- The *second definition* of the real exchange rate (e^*):

$$e^* = (P_T/P_{NT})$$

Explain why the appreciation of the real exchange rate is taking place simultaneously with the surplus current account.

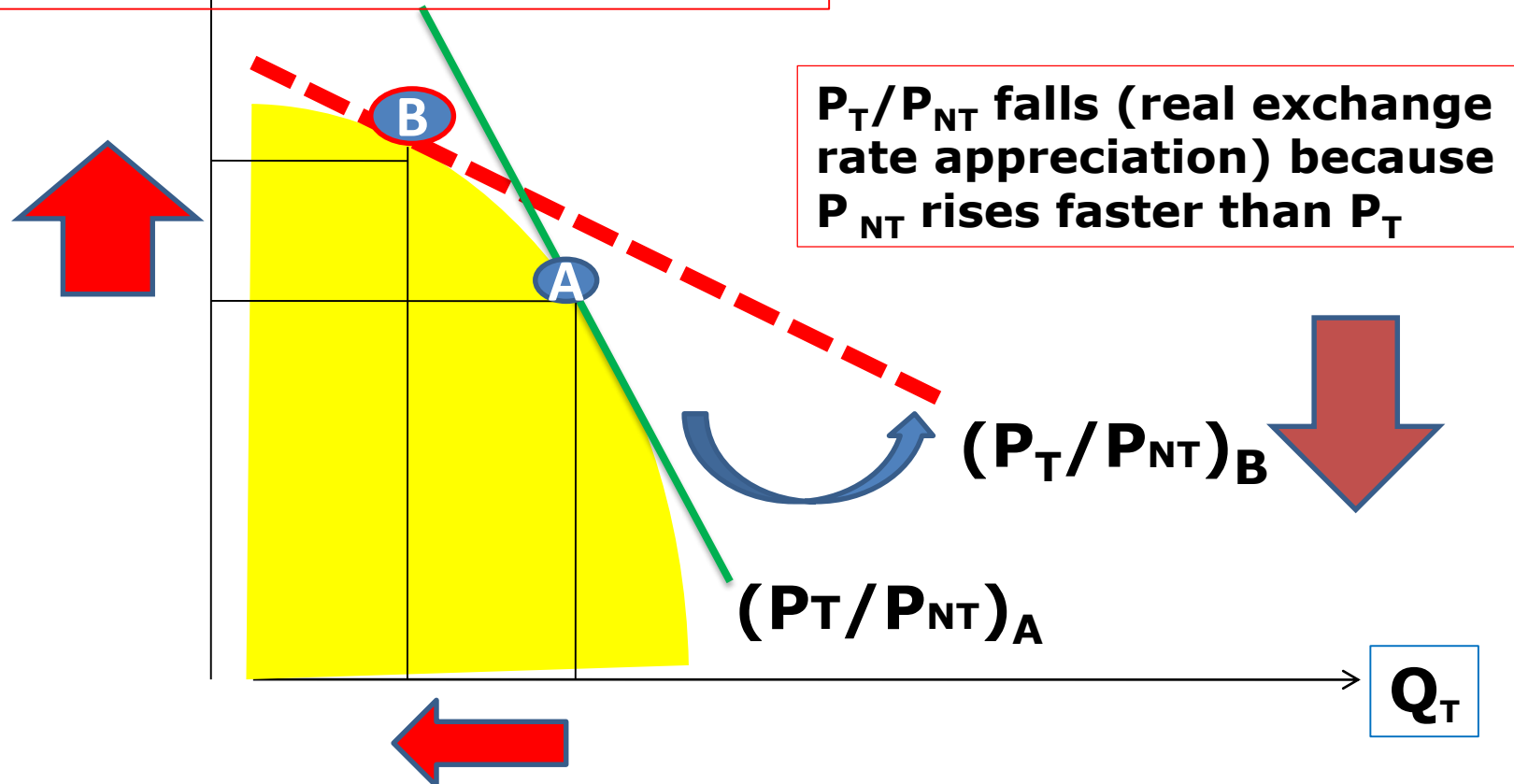
Dutch disease and the erosion of competitiveness:

Real exchange rate (P_T/P_{NT}) appreciation

Resources were transferred to the non-traded sector

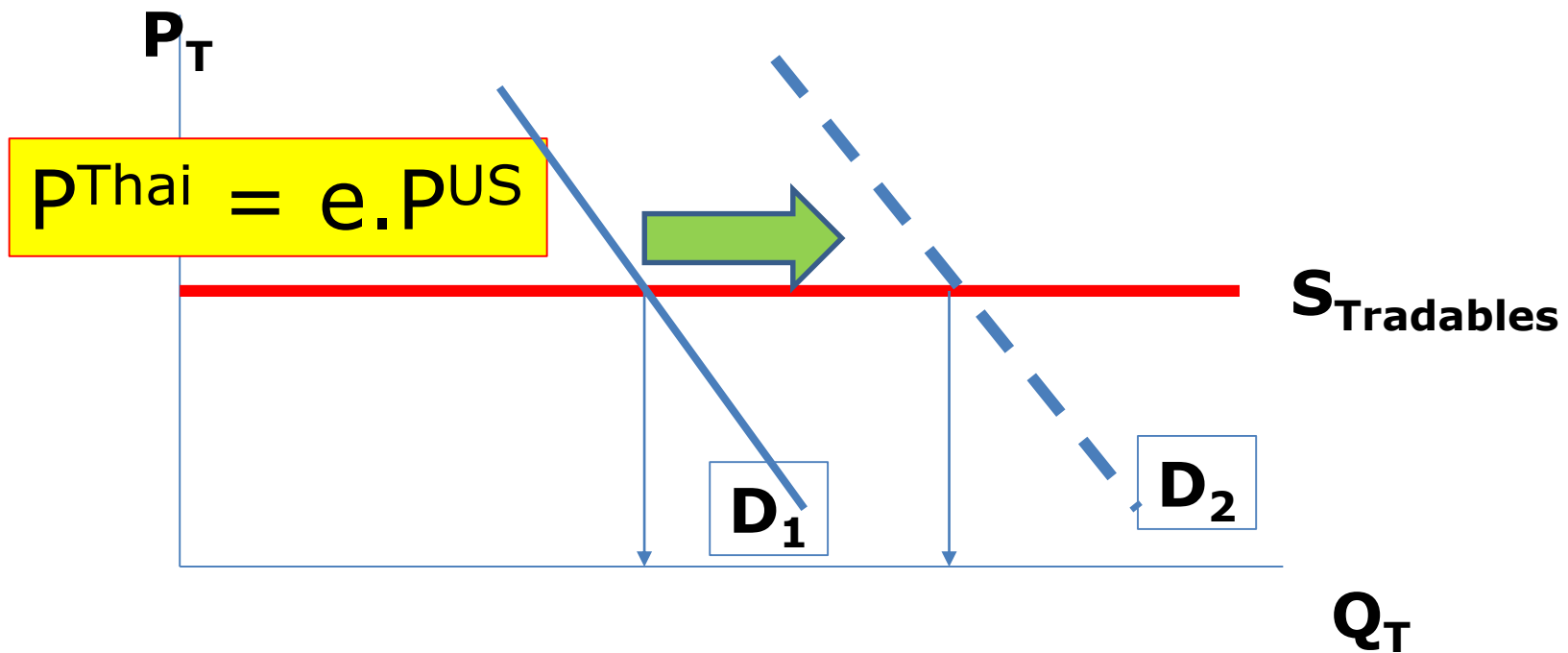
Q_{NT}

More resources are allocated to property and the services sector



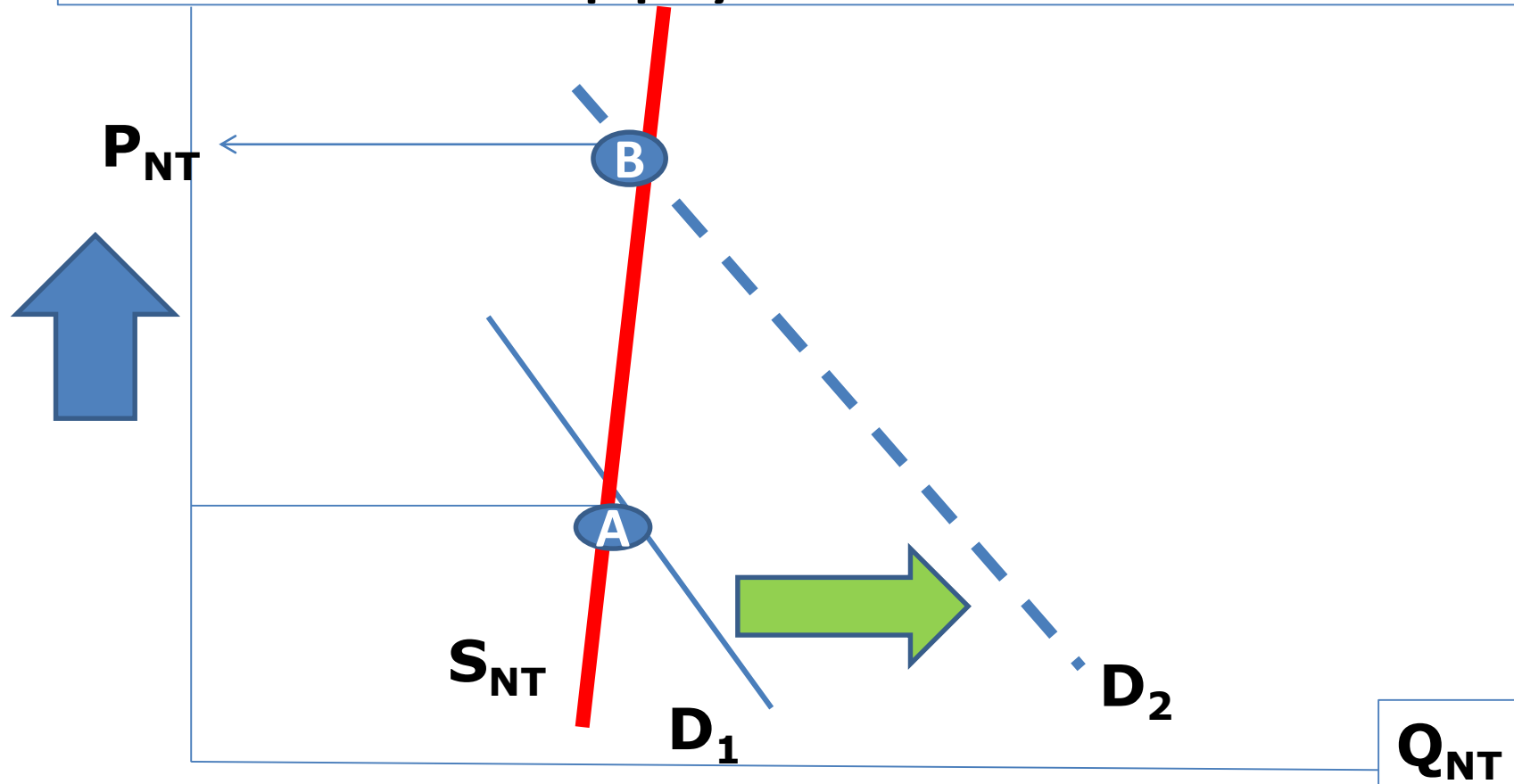
Reduce the production of exportable and importable products

In the traded sector, where the **Law of One Price** rules: supply of traded goods is infinitely elastic, because its price is determined in the world markets (USA and China)



*D shifts outward as a result of capital inflows
 P_T remains unchanged*

In the non-traded sector, where its supply is inelastic



D_1 shifts to D_2 as a result of capital inflows
 P_{NT} increases: Hence, (P_T/P_{NT}) rises
Real exchange rate (e^*) appreciates: loss of
International competitiveness



Approaching the Minsky Moment

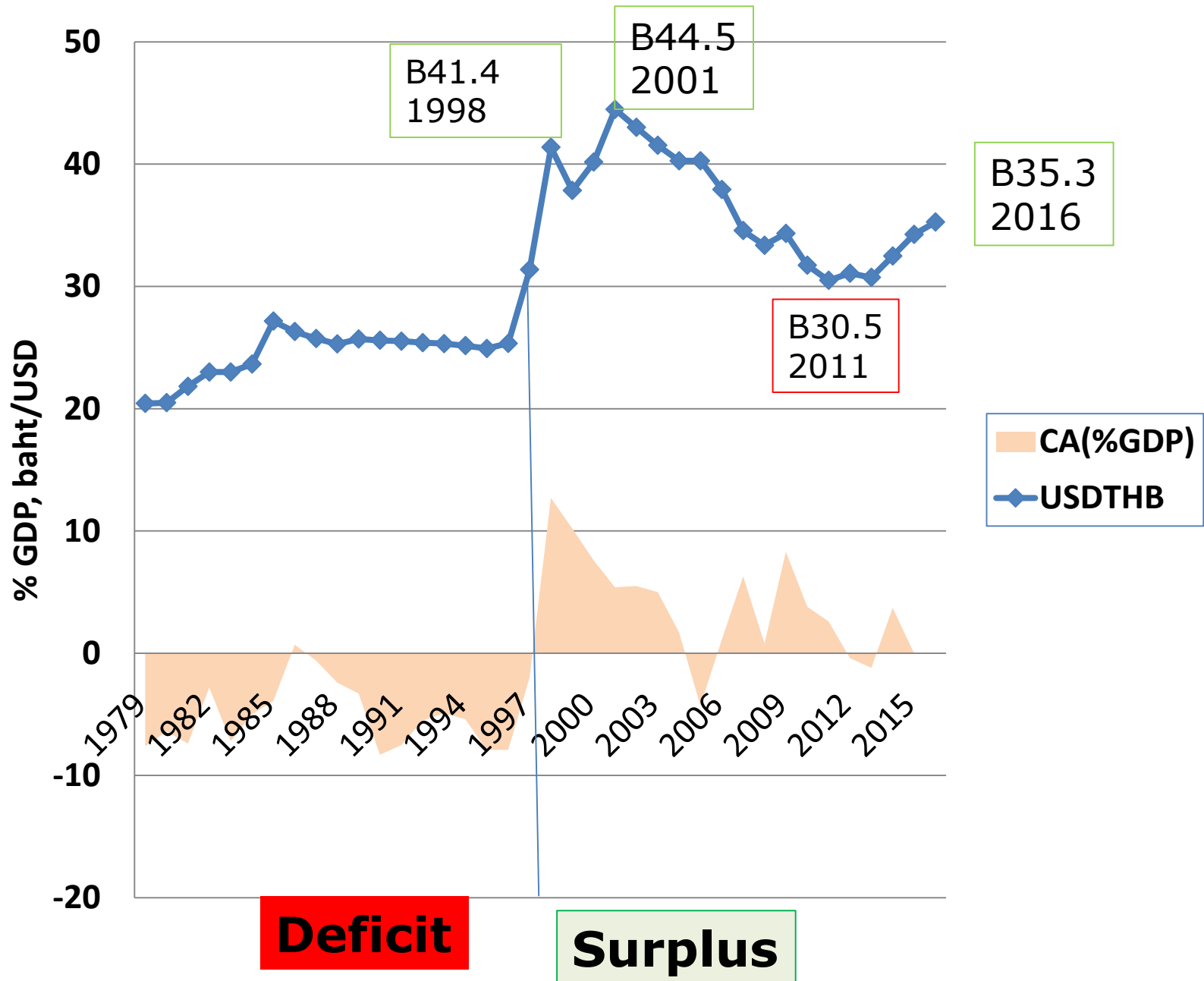
- Notwithstanding the economic slowdown, the stock market and property prices were booming, thanks to capital inflow from other parts of the world.
- One cannot help but ask if Thailand is now slowly approaching the Minsky moment.
- What is needed is a shock that has shaken consumer confidence and investor sentiment such as Covid-19.

Economic crisis in 1997/98

The reckoning day: July 2, 1997

- With the baht succumbing to speculative attacks, BoT decided to float it on July 2, 1997.
- Without a nominal anchor and given the lack of **political credibility**, the value of the baht fell by 56% through to January 1998.
- The deficit became surplus by income and substitution effects via expenditure switching and output contraction.

USDTHB and the Current Account Balance



3. The monetary approach to the balance of payments

Focus on the central bank's Net Foreign Assets

$NFA + CoG + CoF = Cu + \text{Bank Reserves}$

$H = \text{Currency} + \text{Bank reserves}$

$DC = CoG + CoF = \text{Domestic Credit}$

$NFA = H - DC$

H is high-powered money (commercial bank reserves and currency)

$$\Delta NFA = \Delta H - \Delta DC$$

- ΔNFA is the change in Net Foreign Assets (NFA), which is the balance of payments
- Domestic credit (**DC**) of the central bank consists of the monetary authority's net claims on the public sector (government debt: CoG) and loans to the private sector (banks: CoF)).
- To reduce the balance of payments deficit, or the make $\Delta NFA > 0$, domestic credit (**DC**) extended by the central bank must be curtailed.
- Fiscal austerity must be initiated and maintained so that the claim on government by the central bank is reduced ($\Delta DC < 0$).

The monetary approach to the balance of payments:

How to raise the international reserves when the country is experiencing BP deficit

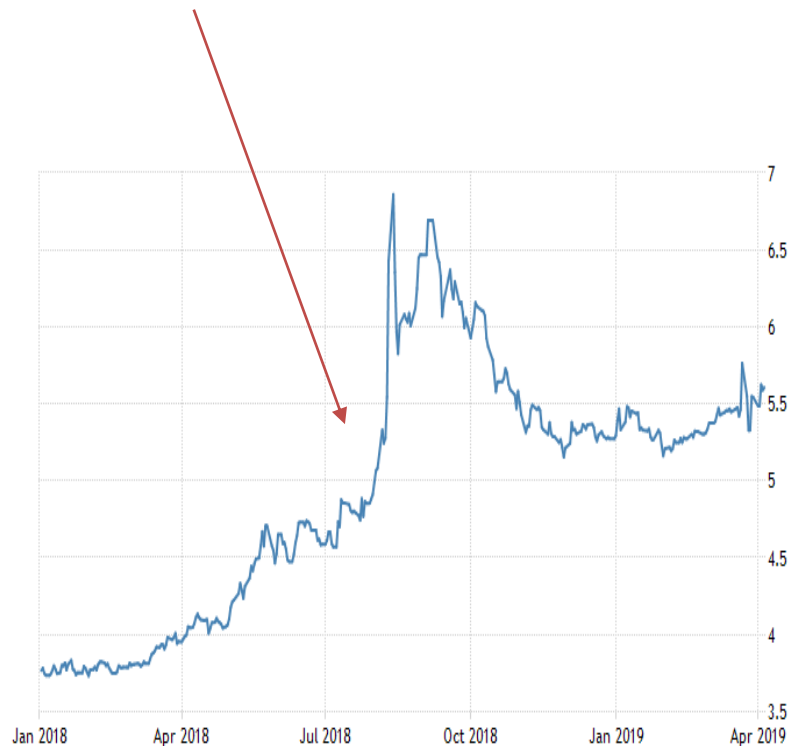
- $\Delta H > 0$ if the central bank increases the required reserve ratio of commercial banks to raise high-powered money (commercial bank required reserves are the central bank's liabilities)
- Fiscal consolidation and reserve ratio hikes are essential contractionary policy to curtail imports.

The IMF's policy prescriptions to countries applied for conditional loans

- IMF prescribed the maximum level of **domestic credit expansion** as a condition, in addition to **currency devaluation and fiscal austerity**, for troubled countries to be eligible for obtaining financial assistance from the IMF (e.g. Argentina and Turkey in 2018)

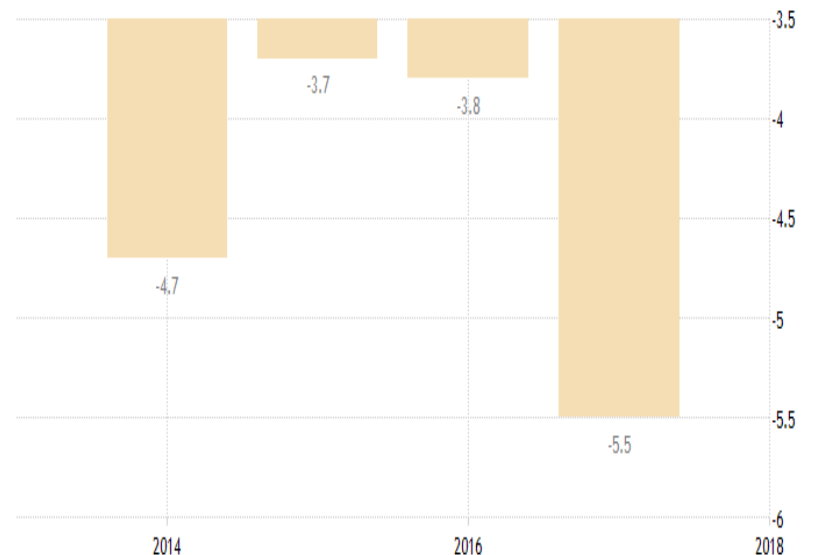
The IMF prescriptions

Devaluation of the Turkish Lira



SOURCE: TRADINGECONOMICS.COM | OTC INTERBANK

Current account (% GD)



SOURCE: TRADINGECONOMICS.COM | CENTRAL BANK OF THE REPUBLIC OF TURKEY

The lack of policy credibility

During the 1997/98 financial crisis

- Policy credibility is essential for any country that adopts a floating exchange rate regime.
- There were frequent turnovers of the minister of finance and the governor of the Bank of Thailand.
- The lack of institutional independence was evident during the period of economic turmoil.

Lessons learned

- Thailand faces the reality that the era of cheap foreign capital, zero foreign exchange risks, reckless investment, and spectacular growth is gone.
- A new era of economic rationalism would begin with investment efficiency and a sustainable growth path--albeit much less impressive.
- Have we learned anything from the 1998 crisis?

Central Bank Independence correlates with economic performance

- The Nukul Commission Report viewed that political intervention at the BoT had weakened the ability of the BoT's crisis management.
- **Institution independence** and policy instrument independence are required to create effectiveness of monetary policy.
- A correlation exists between ***central bank independence and price stability***.
- The central bank must earn credibility to make monetary policy credibility.
- Should the BoT be independent of the control of the government?

Lessons from the currency crisis

- Thailand should have allowed the baht to appreciate during the boom years and satisfied with a lower growth rate in the early 1990s.
- Even if appreciating currency discourages exports, it is better to live with the result in slow growth but low foreign debt.
- Capital inflows can exert positive and negative impacts.

Further Lessons

- Since capital flows are many times larger than international trade flows, when a country relies too heavily on short-term foreign debt to finance a current account deficit, it is impossible for the central bank to defend a fixed exchange rate for very long—let alone to inflict wounds on currency speculators (e.g. George Soros's quantum fund).
- **Accountability and transparency** should be well established so that the central bank is not tempted to engage in behavior that is akin to gambling to get out of a crisis.
- *If we keep on repeating the same mistake, the lesson is yet to be learned.*

4. Implication of the flexible exchange regime

- Some *instability* in foreign exchange rates is a natural consequence of the adoption of a flexible exchange rate regime.
- When Thailand floated the baht from its previous untenable fixed rate, the baht-dollar exchange rate experienced *overshooting* (*The baht went down to 55.5 baht in January 1998 before slowly appreciated*).
- Various factors contributed to this phenomenon, including speculative bubbles, price stickiness, the rapid strengthening of the dollar against the yen, political instability, and the *lack of policy credibility*.

What is the appropriate level of the baht exchange rate?

- It is exceedingly difficult to determine appropriate exchange rates by using the concept of PPP or the current account balance.
- The cost of intervention in foreign exchange markets could be too high to warrant the action.
- **Intervention** should not be employed to change the direction of exchange rate movements.
- There is some room for the creation of an orderly and **gradual movement** of the exchange rate to reduce the amplitude of the swings.
- However, the Bank of Thailand cannot lean against the wind of sudden changes the value of the dollar.

Benefits of a flexible exchange rate

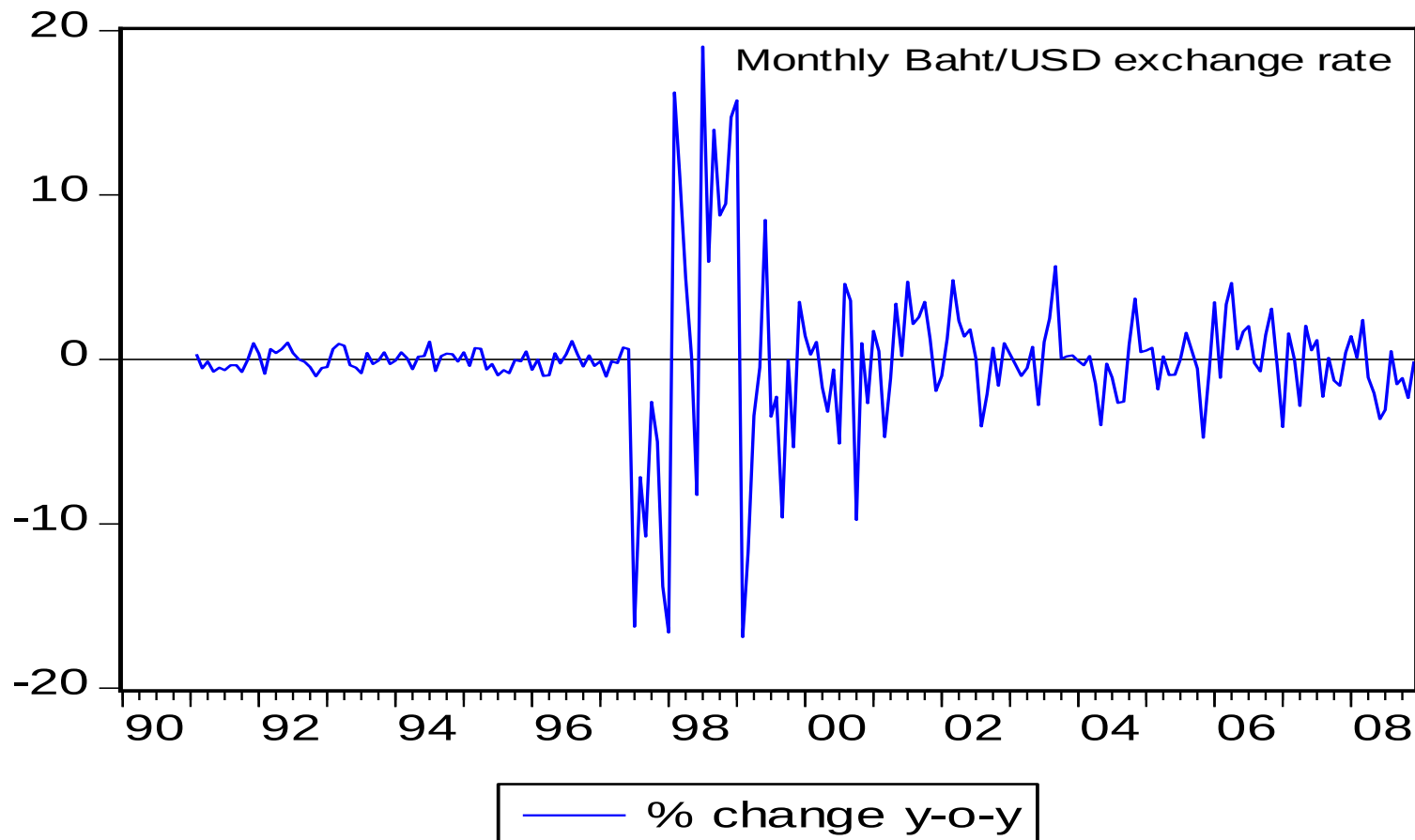
- Flexible exchange rates can *impose discipline* on the government.
- Exchange rate movements *trace the anticipated successes or failures* of the government's economic management.
- *Since the baht is very strong in 2019, does it bode well for the strength of the Thai economy?*
- *Capital flight* can be **eliminated** only by the establishment of **sound macroeconomic fundamentals**.
- The rampant hyperinflation in Venezuela was 8,900% in April 2018. Capital flight galore.

More benefits of a flexible exchange rate regime

insulation from external shocks

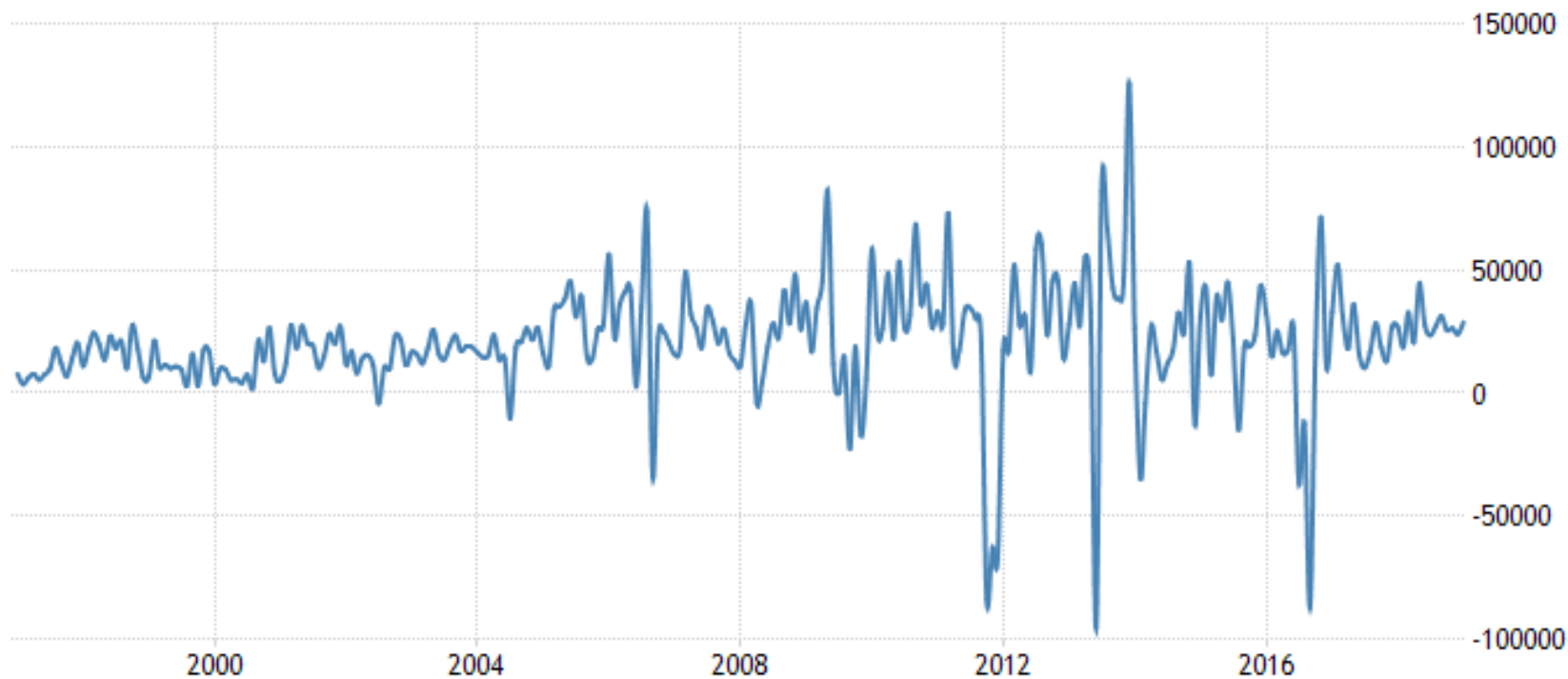
- The flexible exchange rate is expected to **insulate** the economy from shocks originating in the goods markets.
- However, it is asking too much to expect the flexible exchange rate to cushion **instability originating from money markets** hit by a **crisis of confidence** in the financial system.
- When imports are highly responsive to changes in absorption and when capital flows do not respond significantly to changes in international rate differentials, both **fiscal and monetary policy can play an important stabilizing role.**

Flexible exchange rate: Some wiggle room



More volatility in net FDI

Can you explain why?



SOURCE: TRADINGECONOMICS.COM | BANK OF THAILAND

Currency and banking crises are related

- It is equally possible that currency appreciation can stimulate growth despite its negative impact on net exports.
- The crucial factor is the *impact of the currency changes on bank credit.*
- A country can experience currency appreciation and economic growth as long as domestic credit increases at a normal phase.

Should the baht be kept undervalued?

How can we tell if the exchange rate is at the optimal level?

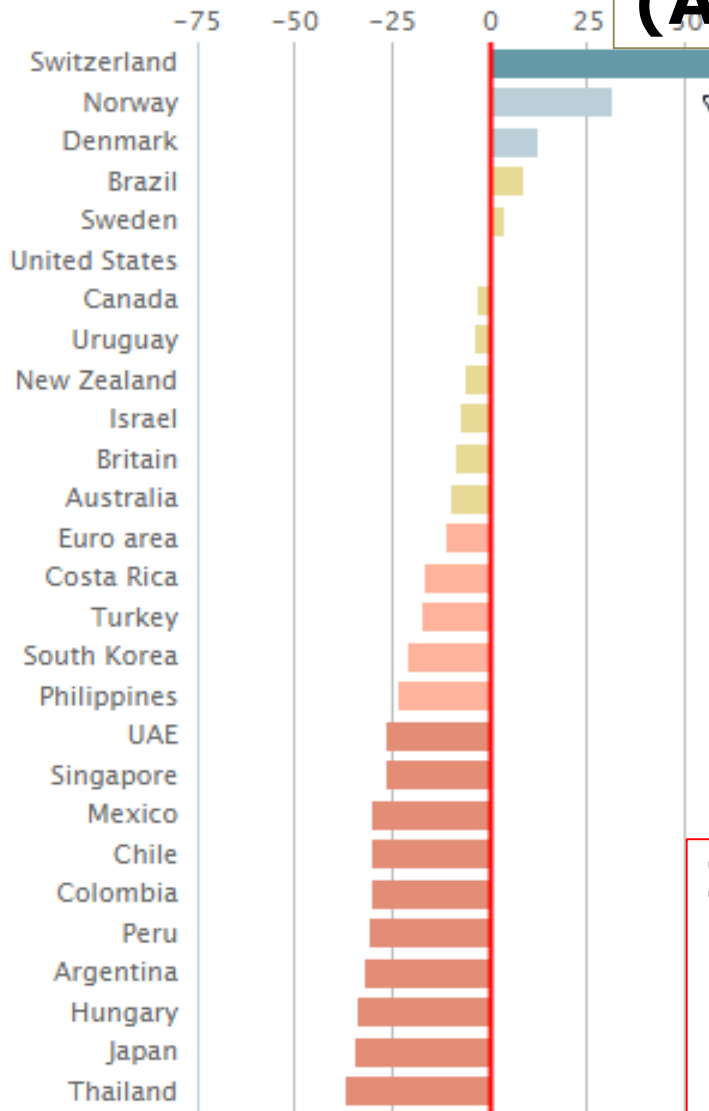
- It is a myth to assume a close link between currency depreciation and international competitiveness.
- Variations in Thailand's export growth can be explained very well by the fluctuation of world income.
- The strength of the US, China, and Japanese economies is closely related to Thailand's export performance.
- Can we come up with the *canary in the coal mine* to tell if our exchange rate is at the dangerous level?
- The Big Mac Index: *Burgernomics*

Burgernomics

- THE Big Mac index was invented by *The Economist* in 1986 as a lighthearted guide to whether currencies are at their “correct” level.
- It is based on the theory of purchasing-power parity (PPP), the notion that in the long run exchange rates should move towards the rate that would equalize the prices of an identical basket of goods and services (in this case, a burger) in any two countries.
- Burgernomics was never intended as a precise gauge of currency misalignment, merely a tool to make exchange-rate theory more digestible.

Based on the law of one price (Absolute PPP)

January 2015



$$P^T = e^* \cdot P^{USA}$$

$$e^* = (P^T / P^{USA})$$

$$e^* = (99 / \$4.79) = 20.7$$

$$e = 30.0 \text{ (actual rate)}$$

The actual baht is undervalued by
 $(e^* - e) / e = 31\%$

Implied exchange rate from the
 Big Mac PPP: 20.7

Big Mac Price in USA: \$4.79

Price in Thailand: 99 baht

Actual exchange rate: 30 baht/\$

The baht is undervalued by 31%

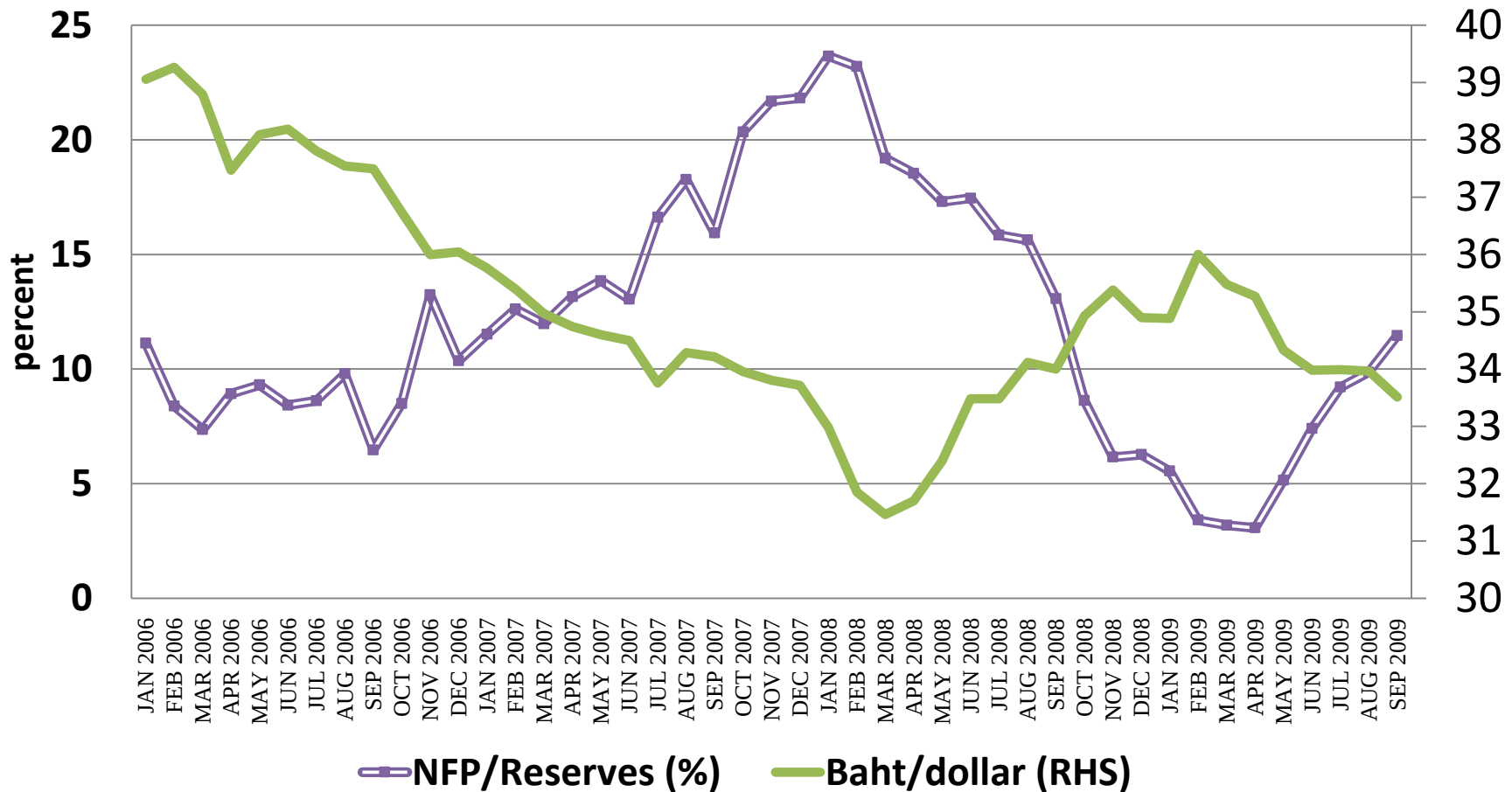
5. Fear of Appreciation

Determinants of the baht-dollar exchange rate

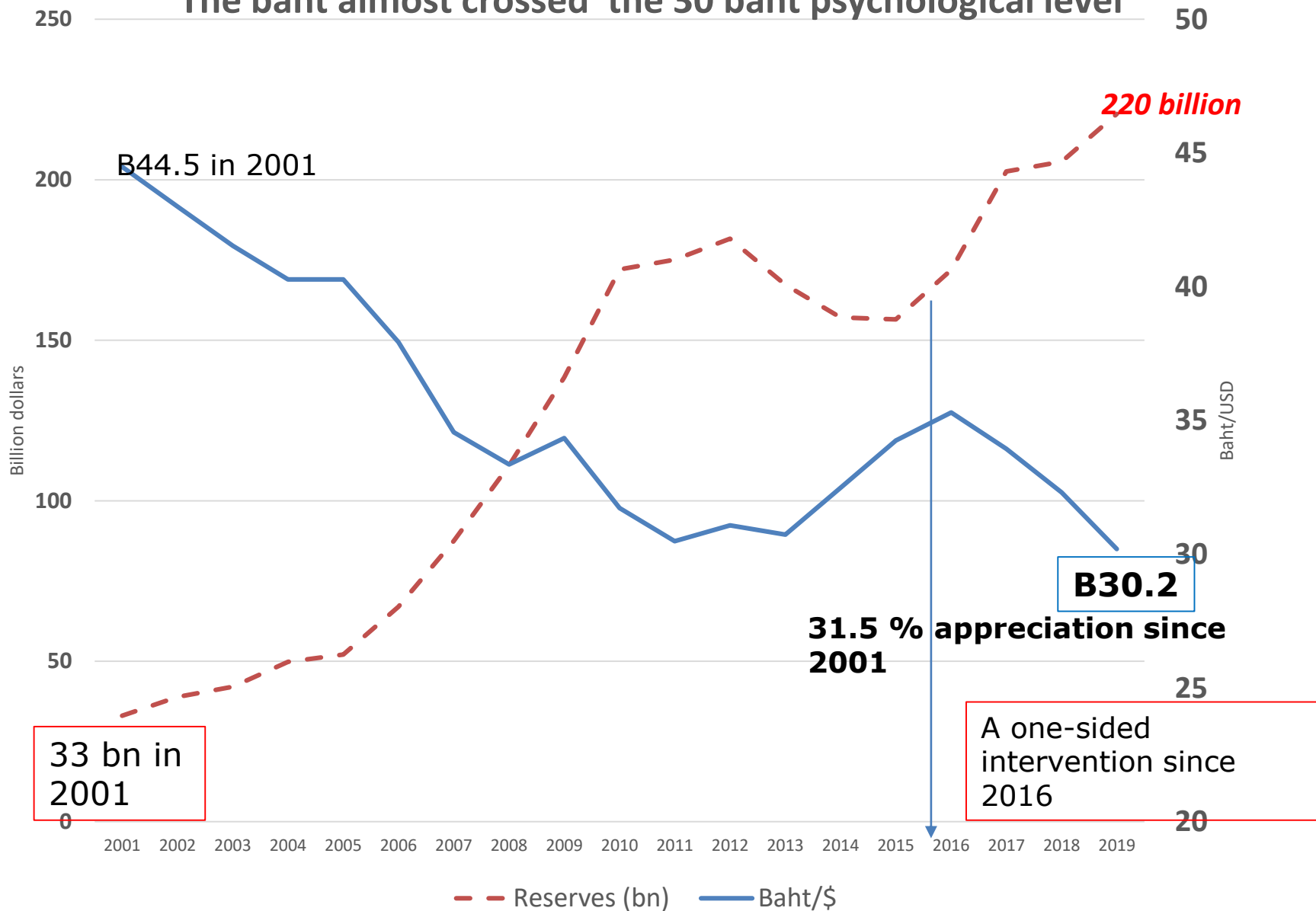
- When the dollar appreciates against major currencies, baht depreciation is a natural consequence.
- The baht move in the opposite direction to the USD.
- Inflation differentials, interest rates, and output growth matter (slide 16).
- Should the Bank of Thailand lower the interest rate to prevent baht appreciation?

Net Forward Position: NFP

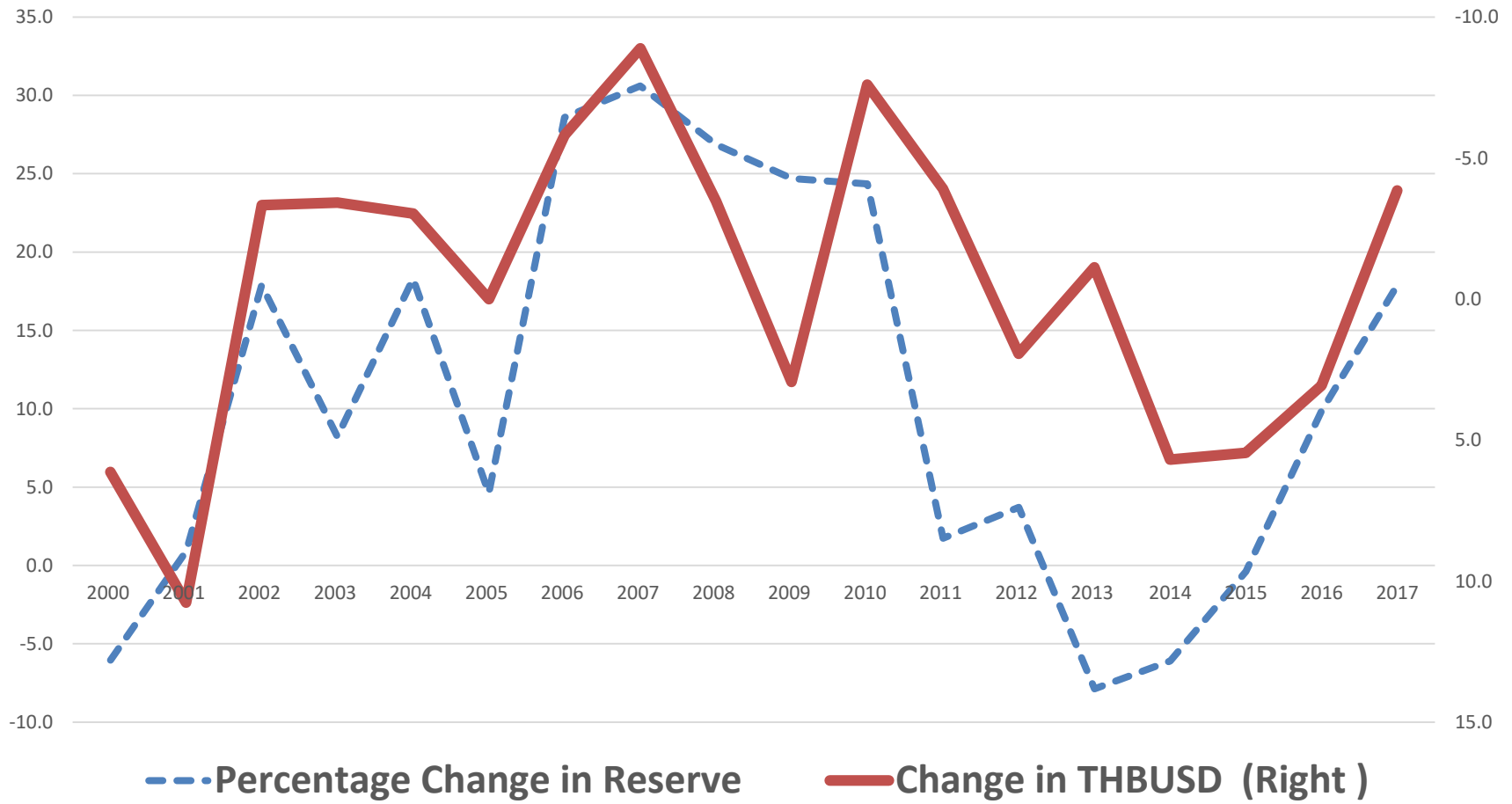
Buying the dollar forward (selling the baht forward)
to prevent baht appreciation



The baht almost crossed the 30 baht psychological level

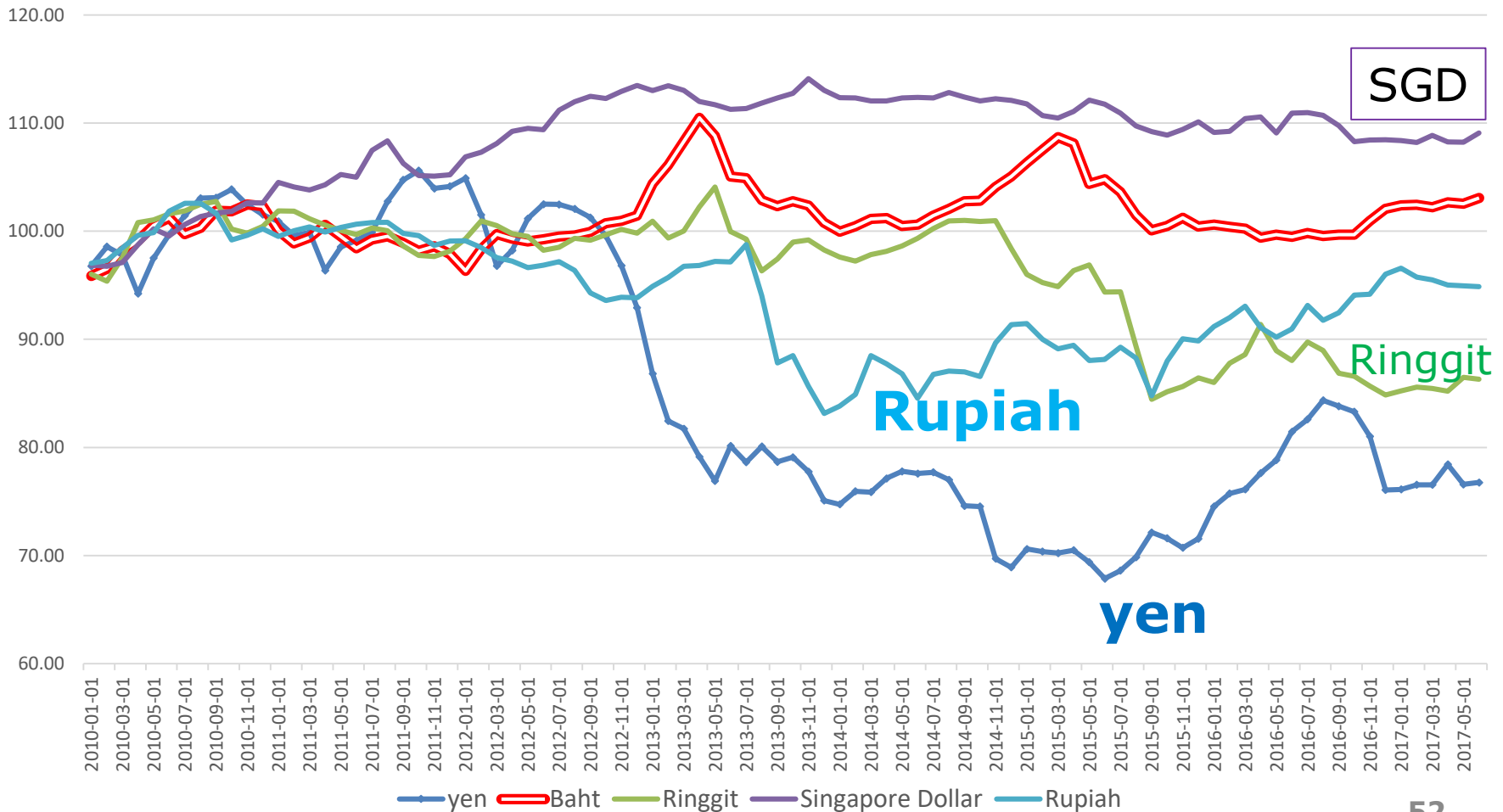


The BoT buys more dollars when the baht appreciates



Fear of floating: Keep it steady

Real Board Effective Exchange Rates
2010-2017



6. Currency manipulation: The watch list of Uncle Sam

- Asia is bracing for the latest US Treasury report on foreign currency manipulators, coming in the middle of a trade war that shows no sign of ending.
- The twice-yearly report is due in coming weeks and will likely see the return of *Singapore, Malaysia and Vietnam* on the watchlist.
- The three Southeast Asian nations were cited in the May report for the first time, and the Treasury says it keeps newcomers on the list for at least two straight reports. **China** -- which was formally labelled a currency manipulator in August -- *Japan and South Korea* were the other Asian economies cited at the time.

Definition of currency manipulators

A country makes it on the watchlist if it meets two of three criteria:

- (1) A trade surplus with the United States of at least **\$20** billion;
- (2) A current-account **surplus** of a minimum of **2%** of gross domestic product; and
- (3) persistent, **one-sided intervention** in the currency equivalent to 2% of GDP in six months of a year.

Thailand was uncomfortably close to being placed on the monitoring list

- Thailand, which successfully dodged the watchlist in May's report, could find itself in the crosshairs this time as its trade surplus with the US in the 12 months through August nears \$20 billion and its current account surplus remains above the 2% threshold.
- Thailand was highly qualified in 2019

- 1. The real exchange rate**
- 2. The Dutch Disease**
- 3. The Monetary Approach**
- 4. Implications of a flexible exchange rate**
- 5. Fear of appreciation**
- 6. Currency manipulators**

How should Thailand conduct exchange rate policy during the trying time of Covid-19?

Conclusion

- Appropriate policy responses to external shocks must include: maintain realistic exchange rates and positive real interest rates.
- Avoid price distortions caused by price controls.
- Temporary intervention can be done in case of market failure: utilizing public spending to restore confidence
- Transparency is required to establish trust, confidence and cooperation between the private and public sector.

Concluding remarks

- Until recently, Thailand's exchange rate policy has *exhibited consistent market intervention*.
- Output recovery depends on consumption rebound which requires consumer confidence.
- Export growth, an important growth driver in Thailand, is mainly determined by conditions in the world market rather than the bath weakness.
- What does the lesson from the 1997 currency crisis tell us about Thailand's exchange rate policy in 2019?
- Exchange rate policy has ramification on poverty and income inequality since the performance of agricultural exports affects the poor.