

Session 2: Old and New shocks and crises in the 20th and 21st century as challenges for CBs

Question to ChatGPT: Worst financial crises?

A crisis is a situation of great danger, difficulty, or confusion, where problems must be solved or important decisions must be made under extreme pressure.

Financial Crisis: a situation where financial institutions or assets suddenly lose a significant part of their value. In many cases, it is associated with panic or a run on banks, where investors sell off assets or withdraw money from savings accounts because they fear that the value of those assets will drop if they remain in a financial institution.

- The Great Depression (1929-1939)
- The OPEC Oil Price Shock (1973)
- The Asian Financial Crisis (1997-1998)
- The Dot-com Bubble (2000)
- The Global Financial Crisis (2007-2008)
- The European Sovereign Debt Crisis (2010-2012)



S 2 Outline : Types of Crises reviewed here S2

- S 2.1. Fiscal and Monetary interactions: **Macroeconomic Populism** (the role of monetary –CB– financing of fiscal deficits)
- S 2.2. Capital Flows, Exchange Rate interactions and Credit: **the Asian Crisis** (the role of FX bank credit, fixed ER and CB reserves)
- S 2.3. The Global Financial Crisis (the role of financial cycles, regulatory capture, domestic credit in the real economy and international spillovers) (later in **Session 3**)
- S 2.4 Financial innovation, AI, algorithms and **“Digital” financial crises**: the SVB bank run (the role of information in financial systems and of supervision by authorities, including CBs)
- S 2.5. Supply and demand shocks and inflation: 2021-23 inflation surge, Covid and the War in Europe (the role of expectations for CB and policy makers) (later in **Session 6** on Inflation Targeting)

Importance and role of CBs

- Prevention of unsustainable policies, advice to Governments, early warnings
 - Excessive fiscal expansion
 - Excessive credit growth, asset price bubbles; excessive risk taking
- Addressing crises (monetary, financial aspect)
 - Lender of last resort for viable financial institutions; resolving unviable ones
 - Interventions to restore market functions (bond, FX, avoid fire-sales, etc)
 - Coordination with fiscal policy
- Learning lessons and improving institutions
 - Fiscal rules / frameworks, to strengthen public accounts balance, etc
 - Resilience of financial sectors

S 2.1. Fiscal and Monetary interactions: macroeconomic populism (a perennial “oldie”)

- Social political economy issues (poverty, inequality) trigger expansionary policies that boost demand; growth increases first
- Financing by debt (domestic and external), rising taxes and monetary financing of fiscal deficits; financial repression
- Inflation pressure emerges with supply constraint; current account imbalances grow; price controls; no or limited CB policy reaction
- Exchange rate and capital outflows reflect inconsistent macro policies
- Investment slow down; growth declines; inflation accelerates
- Crisis erupts with domestic and/or external trigger

Populist “Paradigm” or “Prior Beliefs”:

- Social dissatisfaction with low growth, inequality as initial condition
- Belief in absence of macro constraints (large fiscal space, idle production capacity, debt levels not relevant, low FX reserves can be by-passed, etc)
- Belief in controls over markets (capital controls, FX-ER fixed, etc)
- Policy prescription: expansionary (usually fiscal) re-activation, income redistribution (usually wages), restructuring of economy (State investment)
- No course correction if/when imbalances emerge (inflation, FX shortage, slow growth)

THE MACROECONOMICS OF POPULISM IN LATIN AMERICA



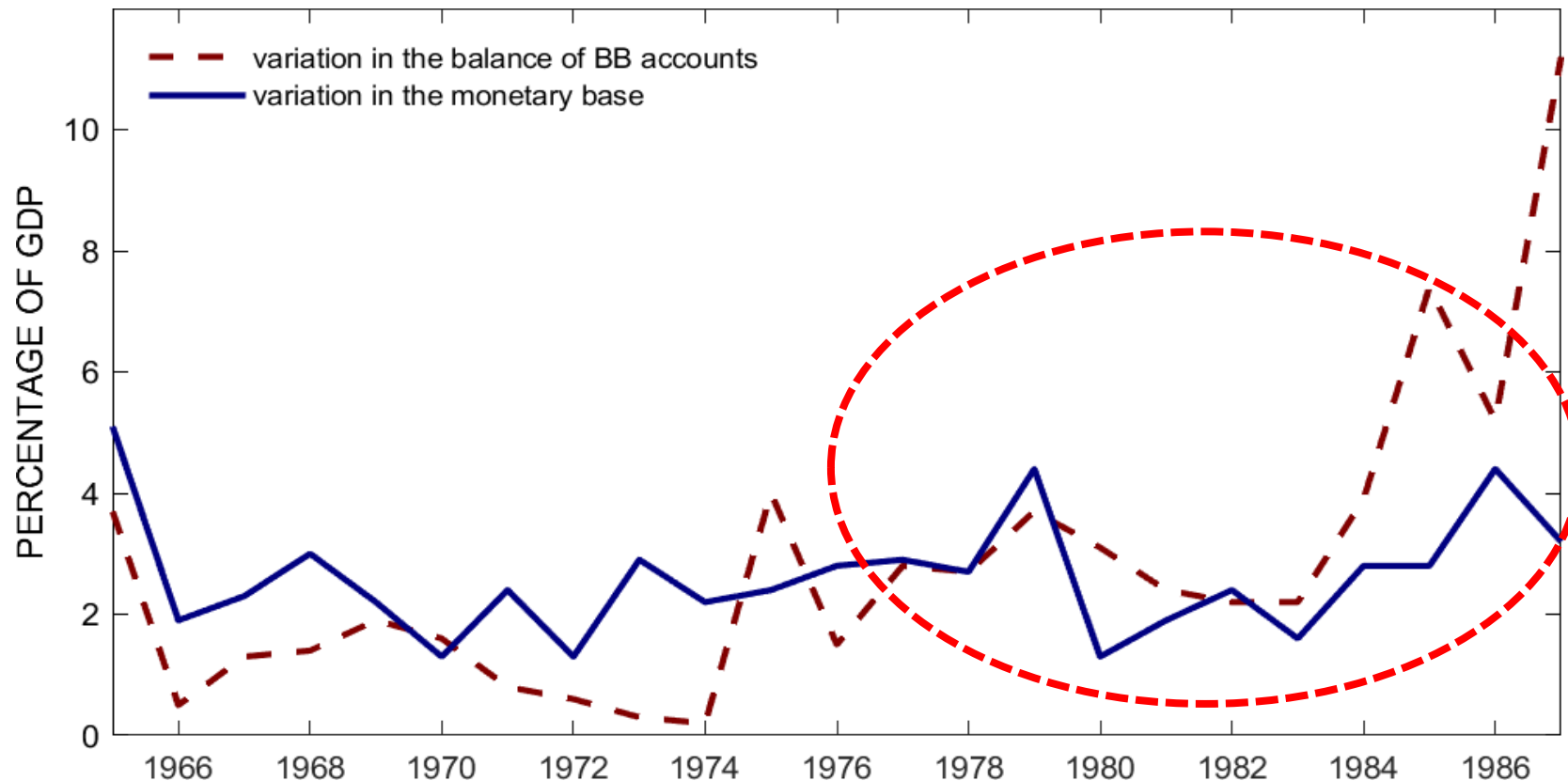
*Edited by
Rudiger Dornbusch and Sebastian Edwards*

Dornbusch R. and S Edwards,
“The macroeconomics of
populism in Latin America”,
NBER and Chicago Press, 1991.

S 2.1.1. Macroeconomic populism Brazil: context

- Brazil went through important transformations during the 1960s-1980s, from being a rural society (55% of the population lived in rural areas), to an urban society (68% of the population living in cities).
- Production structure shifted toward the manufacturing sector, which increased its share of GDP from 32 to 41 percent, while the agricultural sector saw its share of GDP decline from 18 to 10 percent. Period of fast economic growth, with real GDP per capita increasing 4.6 percent per year on average.
- Period of macroeconomic instability, with a deep recession in the early 1960s, increasing external indebtedness following the first oil crisis in 1973, and nominal instability.
- Inflation rates rose in the beginning and reached levels around 100 percent in 1964, when the Plano de Acao Economica do Governo PAEG stabilization plan was implemented after the 1964 military coup.
- Inflation rates fell significantly but started to accelerate again around the first oil crisis in 1973, returning to three-digit levels in 1980.
- A period of heated debate regarding the role of the state in promoting economic development, during which the government undertook major national development plans, such as the Targets Plan in 1956–1961, the National Development Plan I in 1972–1974, and the National Development Plan II in 1975–1979. That process also led to a surge in the number of public banks, with nine out of 23 states creating their own banks between 1960 and 1964 to finance their fiscal deficits, and to the creation of some of the largest Brazilian SOEs, such as Eletrobras in 1962 and Telebras in 1972.

S 2.1.1. Macroeconomic populism Brazil: monetary expansion



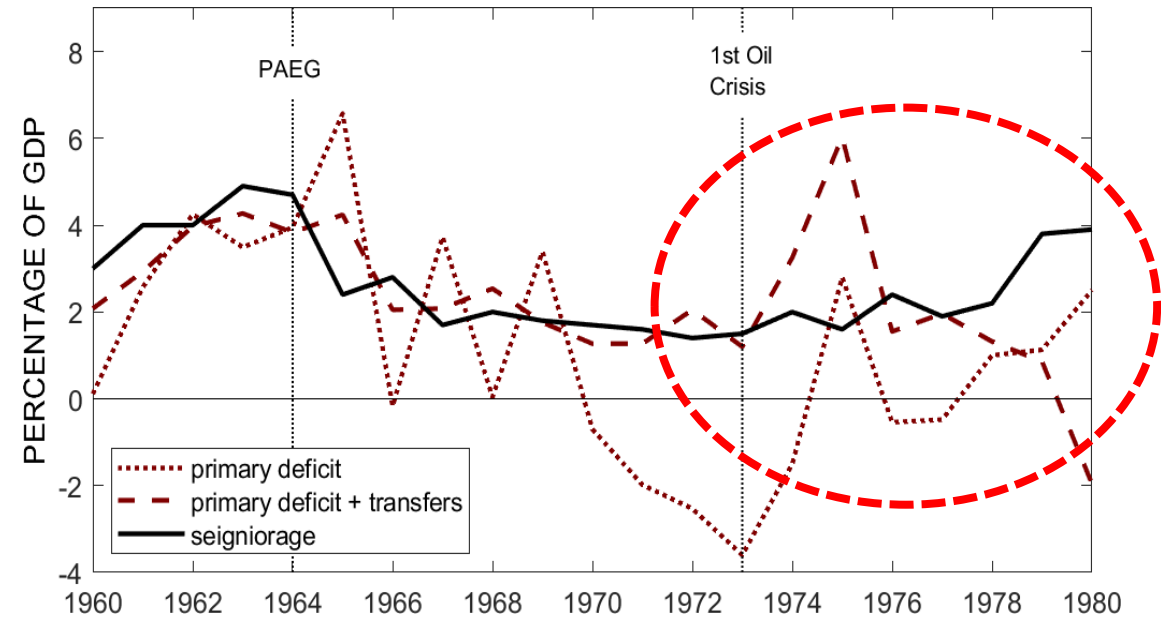
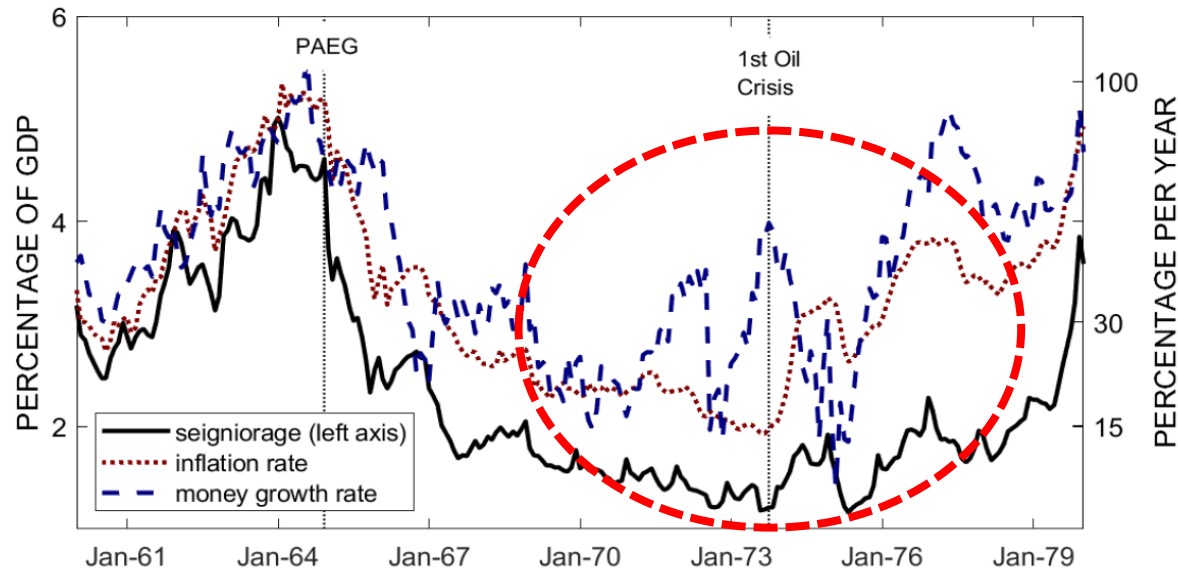
- Before 1964, the Treasury had direct control over money issuance through the Bank of Brazil (BB), which was both the bank of the government and a commercial bank. The main monetary policy instruments in use were the control over the monetary base
- Even with creation of the Central Bank, BB had an account to easily withdraw liquidity to finance the Treasury
- But PAEG 1964-1973 managed to control money creation; deterioration after the 1973 oil shock

Source: Ayres J., and al. (2019)

Sources: Brazilian Institute of Geography and Statistics (IBGE) and Central Bank of Brazil (CBB).

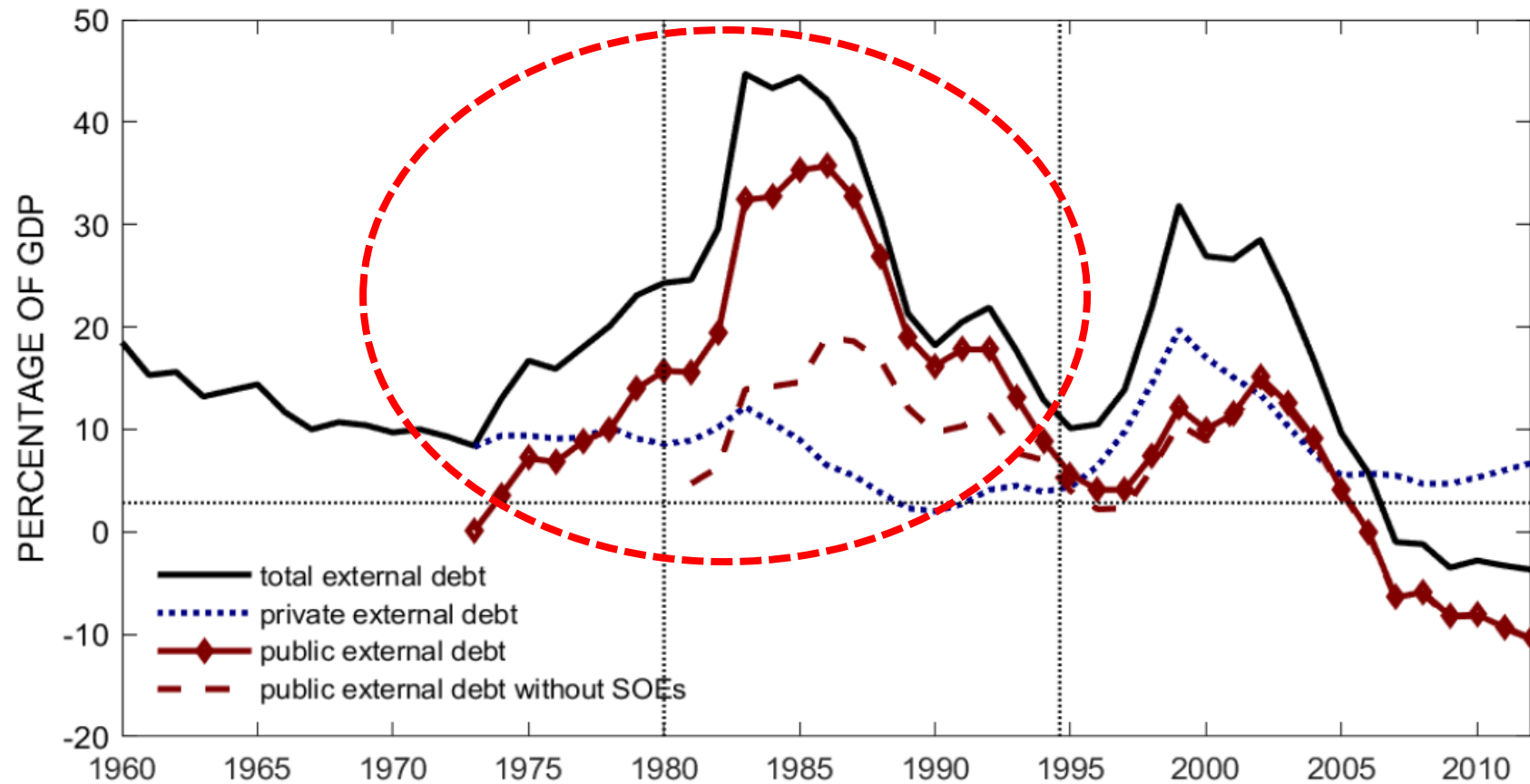
Notes: The variation in the balance of BB accounts denotes the variation in the balance of the accounts of the Bank of Brazil that are reported on the balance sheet of the Central Bank of Brazil, which comprises the *Conta de Movimento* and the *Conta de Suprimentos Especiais*.

S 2.1.2. Macroeconomic populism Brazil: fiscal deficit its monetary financing (after PAEG, 1973)

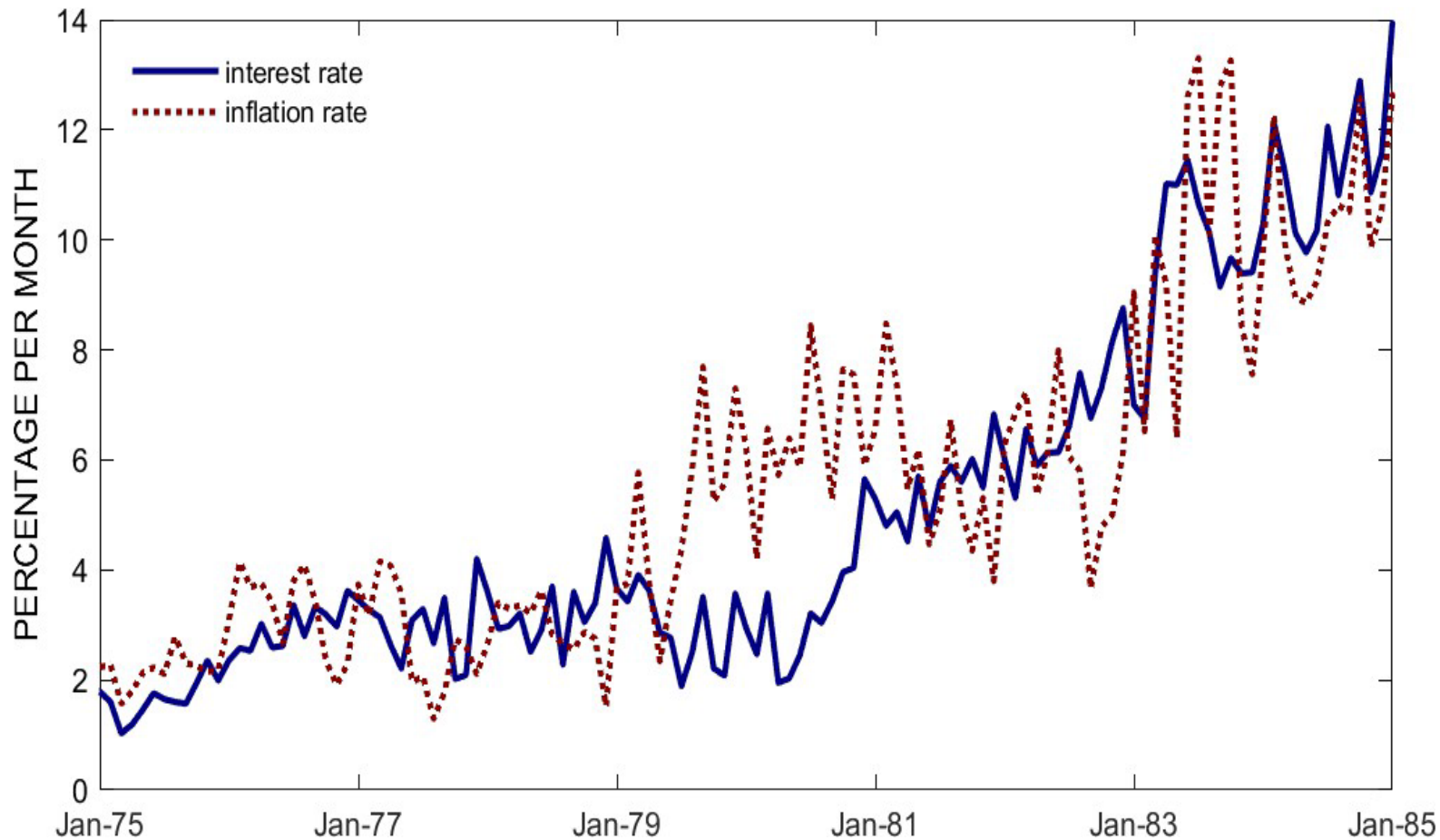


Source: Ayres J., and al. (2019)

S 2.1.3. Macroeconomic populism Brazil: external debt financing after 1973 oil shock



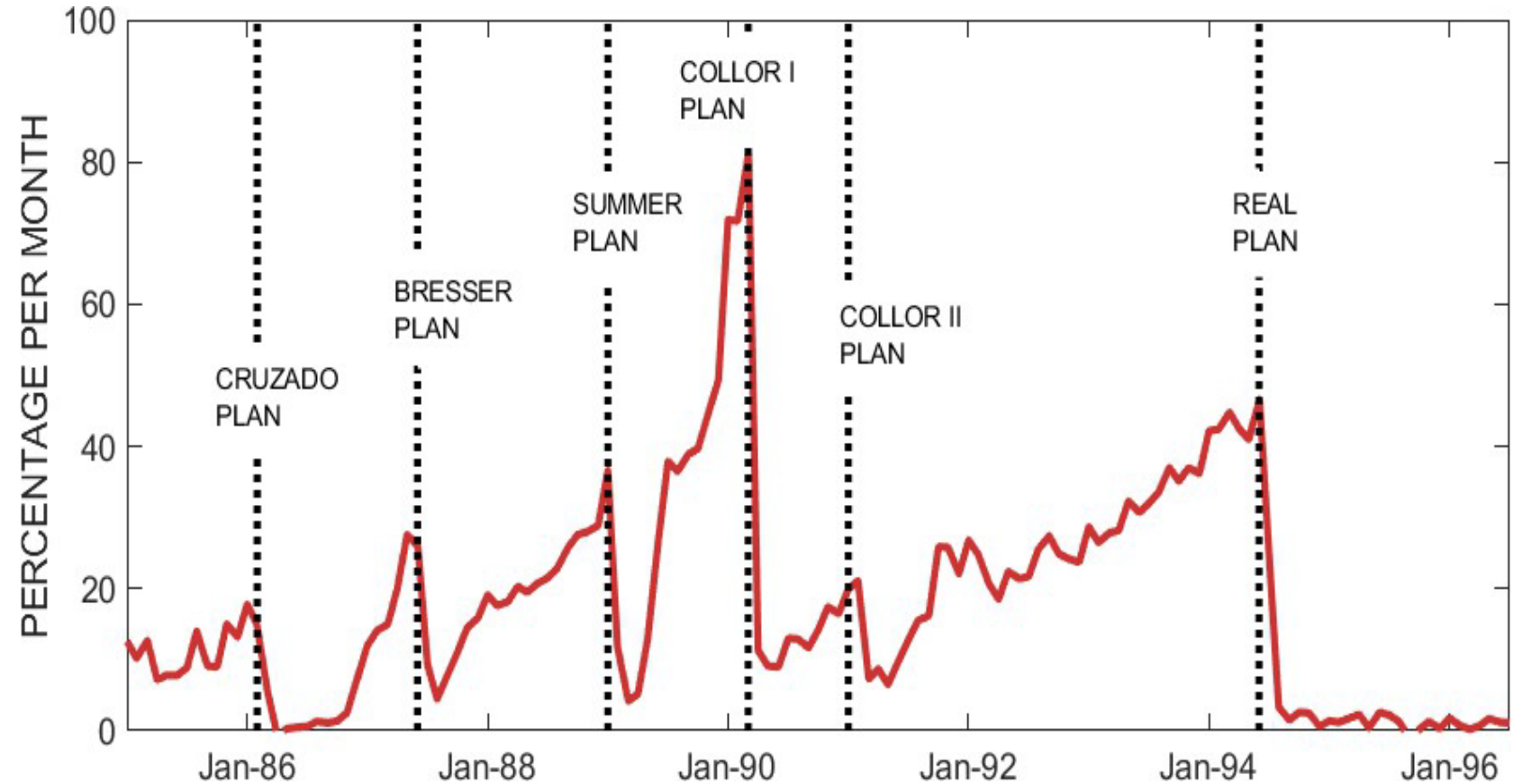
S 2.1.4. Macroeconomic populism Brazil: interest rates



Source: Ayres J., and al. (2019)

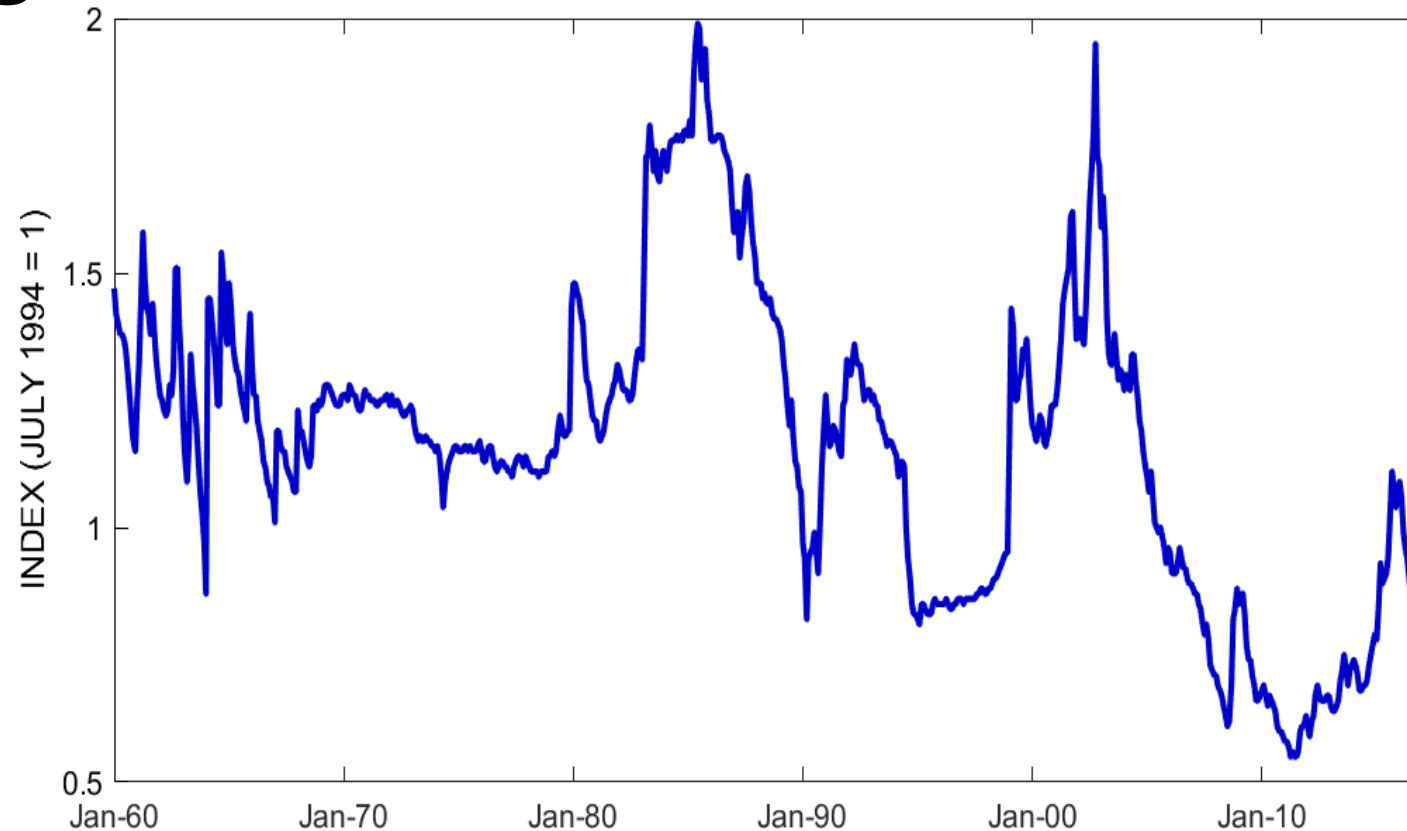
S 2.1.5. Macroeconomic populism Brazil: inflation in **percent per month**

- During the 1980s-1990s, a succession of stabilization Plans (Cruzado, Bresser, Summer, Collor); used price controls (freeze), new currency, etc; even savings deposit freeze
- But major issue of fiscal adjustment was never addressed
- Combination of domestic crisis (high inflation, depreciating ER, current account volatility and stagnant growth



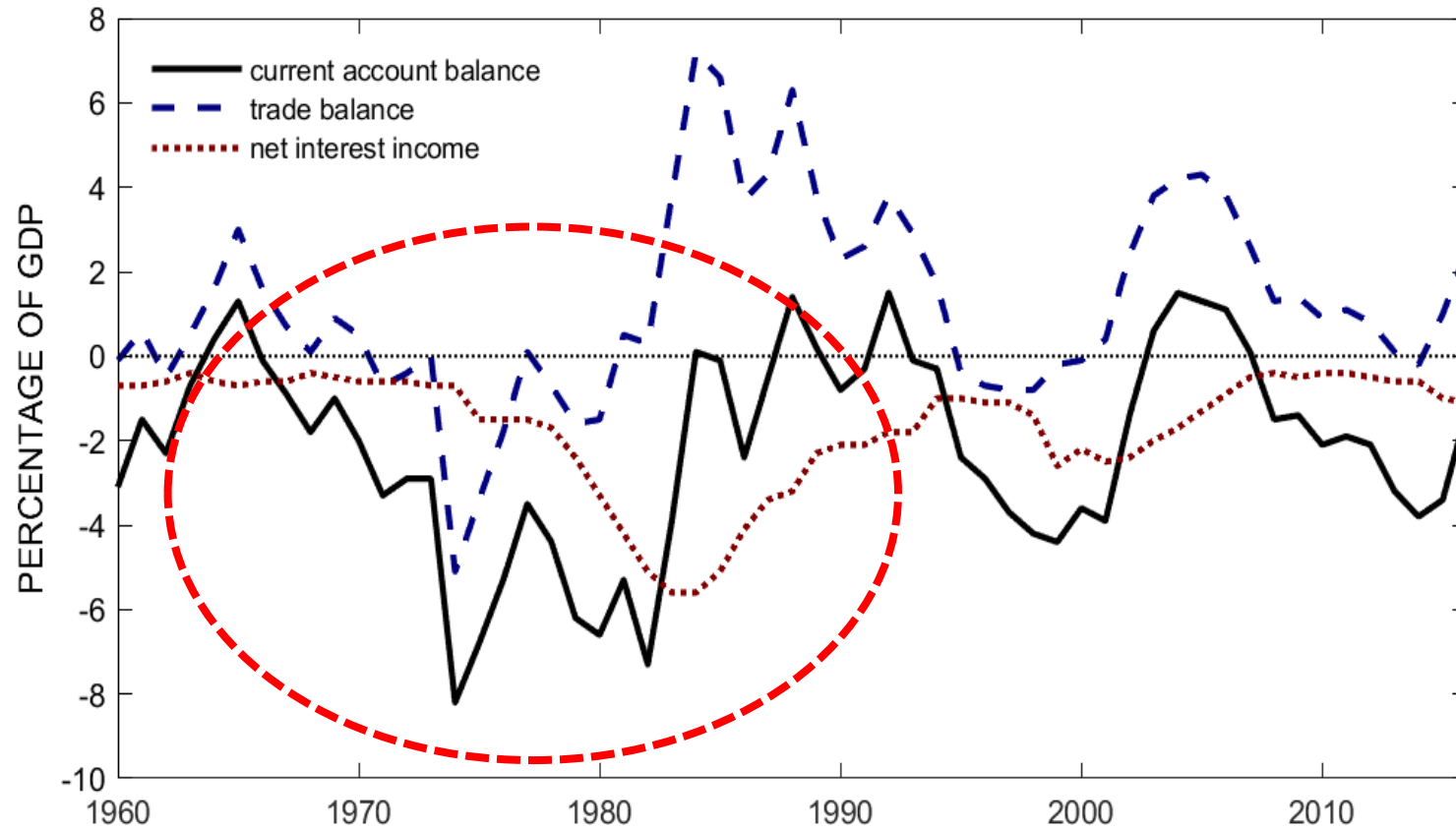
Source: Ayres J., and al. (2019)

S 2.1.6. Macroeconomic populism Brazil: real exchange rate



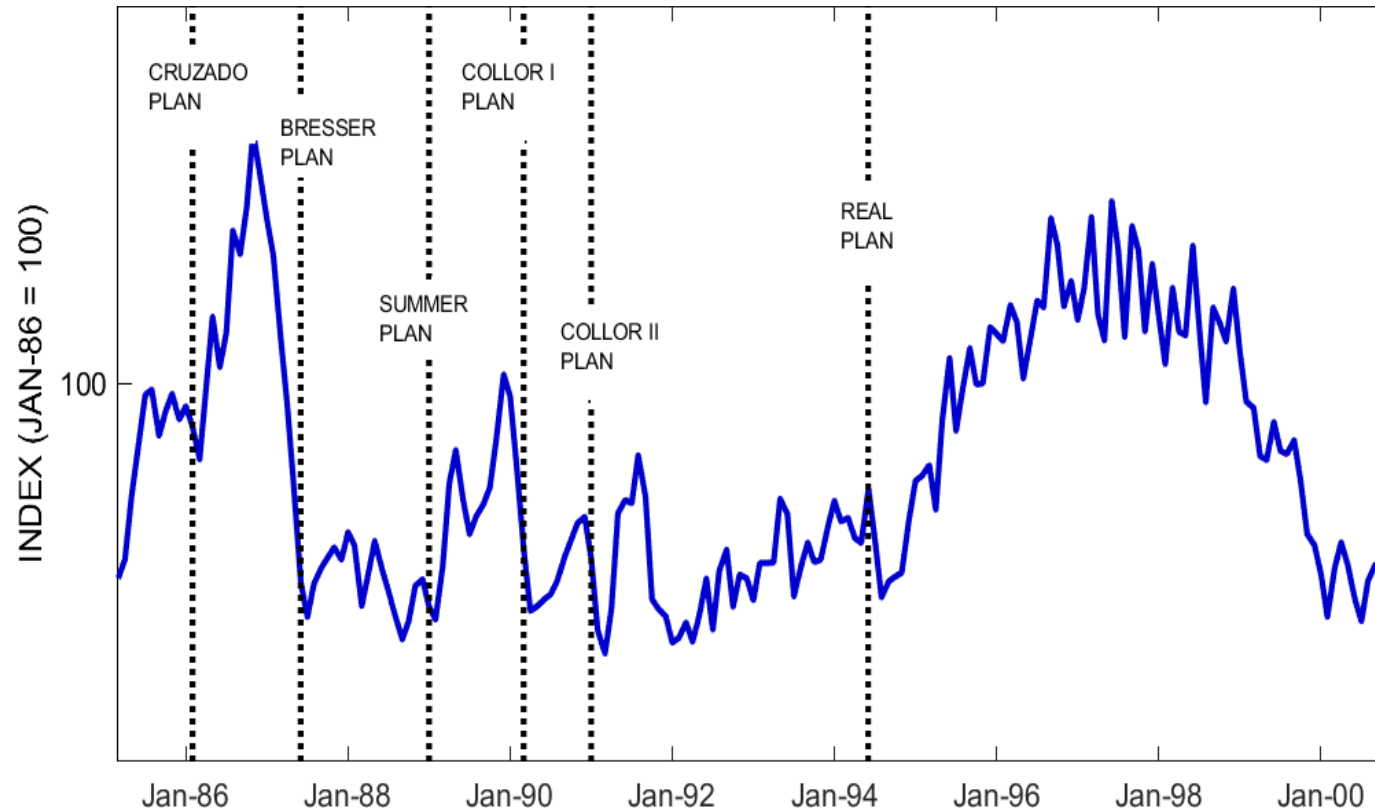
Notes: We consider the bilateral real exchange rate between the United States and Brazil. The real exchange rate is computed as the US price index times the exchange rate divided by the price index in Brazil. We use the US CPI as the price index for the United States, the exchange rate series (R\$/US\$) with average purchase values from the central bank, and the General Price Index, IGP-DI, from Getulio Vargas Foundation as the price index for Brazil.

S 2.1.7. Macroeconomic populism Brazil: current account (interest on debt role)



Source: Ayres J., and al. (2019)

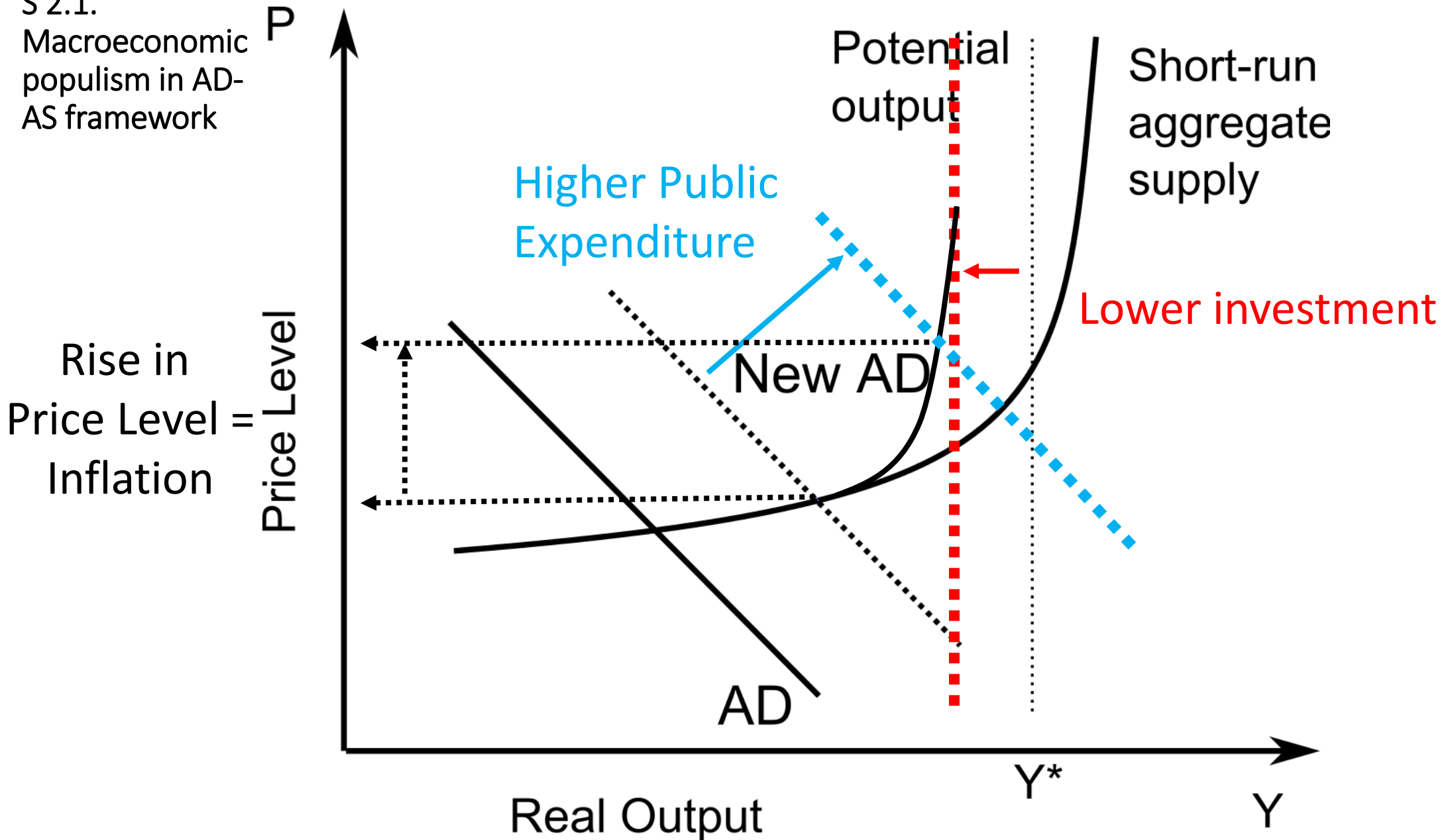
S 2.1.8. Macroeconomic populism Brazil: real wages (supposedly the “main” objective?)



Notes: Wages correspond to the average remuneration in the metropolitan region of Sao Paulo. Real values are computed using the General Price Index, IGP-DI, from Getulio Vargas Foundation. We use a three-month average to smooth the series.

Source: Ayres J., and al. (2019)

S 2.1.
Macroeconomic
populism in AD-
AS framework



S 2.1.9. Macroeconomic populism: policy responses

- “Chronic” high inflation. Recognition of role of passive (dependent) CB financing fiscal deficits; need for stabilization to grow
- Approaches to stabilize high inflation and role of CBs
 - Populist
 - Orthodox Money-based
 - Orthodox Exchange-rate-based
 - Heterodox
 - Gradualist or “shock therapy”

S 2.1.9.a Policy responses: “Populist”

- Chile-Allende (1970-73) Peru-Garcia (1986-90)
- Lot of unused capacity in the economy and pent-up demand (poverty, low wages); monopolistic profits excessive
- Direct policy to control wages and prices without fiscal correction

S 2.1.9.b Policy responses: Orthodox Money-based

- Chile (1973) Bolivia (1985)
- Strict demand management with fiscal adjustment (control of money growth as CB credit to public sector)
- Credit can come from BoP and private sector
- Money growth often as policy target to provide nominal anchor

S 2.1.9.c Policy responses: Orthodox exchange rate

- Chile (1978) Southern Cone Uruguay Argentina (1978)
- Failure of money-based orthodox programs with fiscal adjustment
- PPP conditions hold thus domestic prices determined by exchange rate; control inflation require controlling ER depreciation; require external balance (BOP) thus restrict aggregate demand (fiscal, imports); growth come with structural reforms i.e. trade liberalization
- Exchange rate path as pre-determined to provide nominal anchor

S 2.1.9.d Policy responses: Heterodox various

- Israel (1985) Argentina Convertibility Plan (1991) Brazil Real Plan (1994)
- Inflation has “inertial” component; tight fiscal and monetary policies (“fundamentals”) necessary but insufficient; too costly recessions
- Inertia due to backward looking nominal indexation (wage, ER) and lack of credibility
- Need signaling of new macro regime; sometimes social arrangements and incomes policy; new units of account

S 2.1.10. Macroeconomic populism: lessons from policy responses

- Fiscal adjustment (**end of CB monetary financing**) necessary; both MoF and CB needs to act in restrictive way and adjust
- Price-based nominal anchors (ER, wage) not sufficient; income policy maybe useful
- Cost of orthodox stabilization (recession) depends on inertia, gradual/shock, credibility of MoF/CB
- Washington Consensus
- Post-Washington Consensus

S 2.1.10. Macroeconomic populism: policy recommendations of Washington Consensus by Williamson (1/2)

- Fiscal policy discipline, with avoidance of large fiscal deficits relative to GDP;
- Redirection of public spending from subsidies ("especially indiscriminate subsidies") toward broad-based provision of key pro-growth, pro-poor services like primary education, primary health care and infrastructure investment;
- Tax reform, broadening the tax base and adopting moderate marginal tax rates;
- Interest rates that are market determined and positive (but moderate) in real terms;

S 2.1.10. Macroeconomic populism: policy recommendations of Washington Consensus (2/2)

- Competitive exchange rates;
- **Trade liberalization:** liberalization of imports, with particular emphasis on elimination of quantitative restrictions (licensing, etc.); any trade protection to be provided by low and relatively uniform tariffs;
- **Liberalization of inward foreign direct investment;**
- Privatization of state enterprises;
- **Deregulation: abolition of regulations that impede market entry or restrict competition**, except for those justified on safety, environmental and consumer protection grounds, and prudential oversight of financial institutions;
- Legal security for property rights.

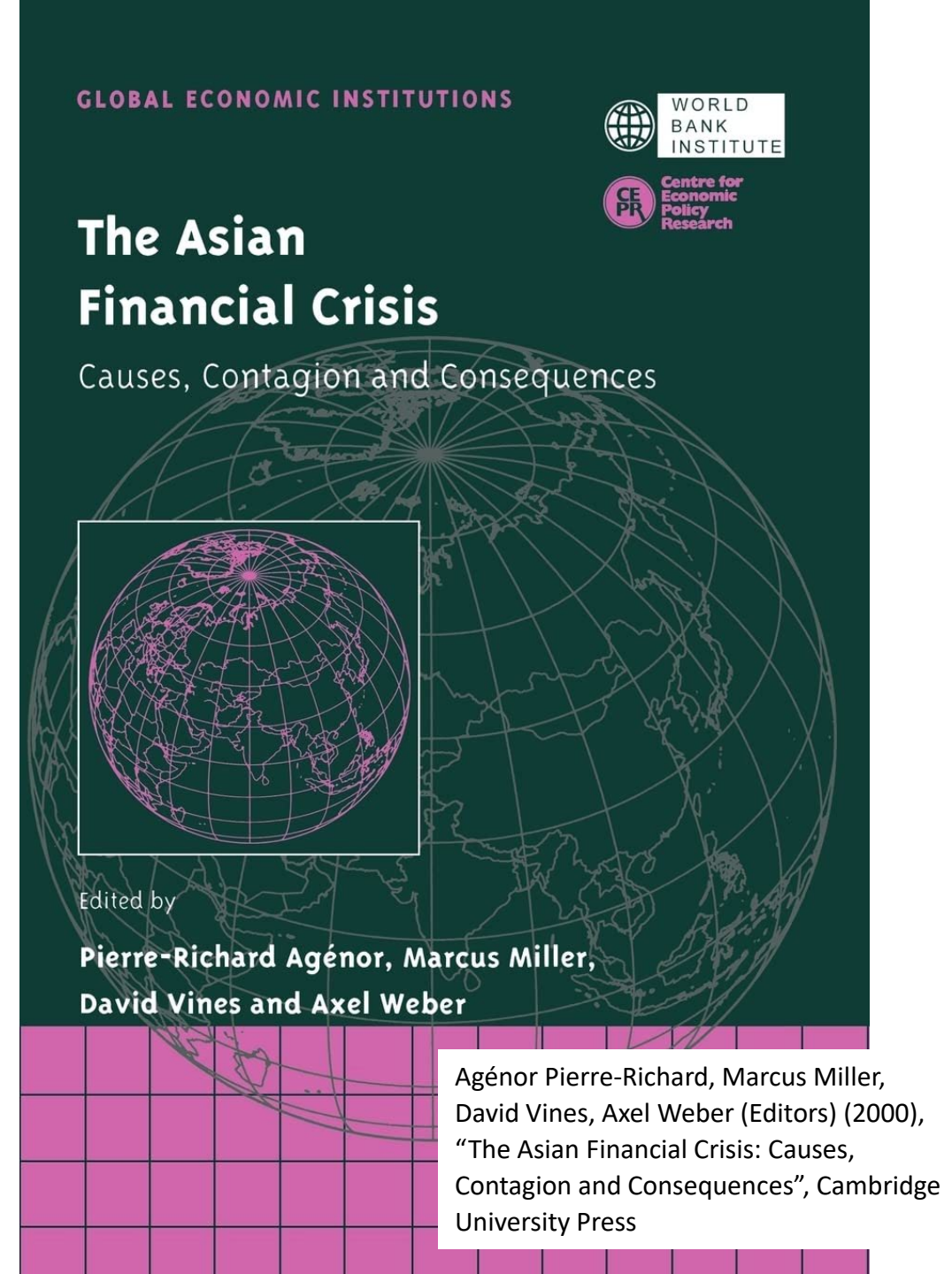
S 2.1.10. Critics of the Washington Consensus (Rodrik)

- No recipe with “one size fits all” adequate; better focus on specific growth diagnostic; specificities matter; invest in capacity (human capital) building; domestic institutions matter and need legitimacy (not imposed by IMF, WB)
- Corporate governance and anti-corruption
- WTO agreements need to be closely tailored to specific local conditions
- Financial codes and standards
- **“Prudent” capital-account opening** to avoid sudden stops / floods
- Independent central banks/inflation targeting, best framework so far
- Social safety nets necessary for structural transformation with targeted poverty reduction to help smooth political economy backlashes

S 2.2. Capital Flows and Exchange Rate interactions: the Asian Crisis

- Missing in the IS-LM-BOP-MF framework: **financial sector & credit & debt (not just transaction money M)**
- Capital Account crisis: Banks (including foreign banks) take credit in FX to finance I and X; provide credit to local firms to invest and export
- X grow fast and steady; credit to firms grow faster than their FX proceeds; but FX proceeds both in JPY and USD
- CBs guarantee fixed / pegged ER with USD despite credit maturity and currency mismatch
- Expansion phase: FX credit ST rolled over; growth increases
- Downturn phase: NPL increases; firms call FX reserves from CB
- Crisis erupts: CB FX reserves depleted; credit crunch; growth falls

- The Asian crisis is **financial in nature first** and provides general lessons similar to the Crash of 1929 or the Global Financial Crisis (GFC)
- The role of '**vulnerability**'; the interconnection between currency crises and financial crises; and why crisis turned into collapse.
- Transmission of large capital inflows. The inflation of non-traded goods prices exacerbated vulnerability; **under-regulated financial markets, fixed or pegged ER** led to speculative attacks. **CB with low reserves became vulnerable; IMF programs**
- **Contagion**, in particular the role of geographic proximity, similar fundamentals.
- **Policy response**. What can be done to reduce the frequency of crises and to mitigate the severity of crises when they happen?



S 2.2 Issues and models to complement IS-LM-BoP MF approach

- S 2.2.1. “Sudden stop” of capital flows, credit crisis and balance sheet crisis
- S 2.2.2 Exchange rate crisis Type I and Type II
- S 2.2.3 “Credit crunch” and imperfect information
- S 2.2.4 Contagion and financial panic

S 2.2.1. “Sudden stop” of capital flows, credit crisis and balance sheet crisis

- Financial integration in the 1980-1990s (especially East-Asian Miracle)
 - Benefits: capital flows (FDI, bank credit, portfolio) accelerate growth momentum; develops local financial system; incentive to macro discipline
 - Costs: concentration, local “bubbles” (real estate); procyclicality of ST flows; herding, contagion, volatility; risk of foreign banks; complacency set up
- Asian Crisis example of pitfalls of financial opening up without proper macro and regulatory framework
 - Growth performance improved but
 - Exuberance with excessive borrowing/lending; currency/maturity mismatch
 - Risk of “sudden stop” materialized
 - Financial crisis contract credit and transmit to real economy (recession)

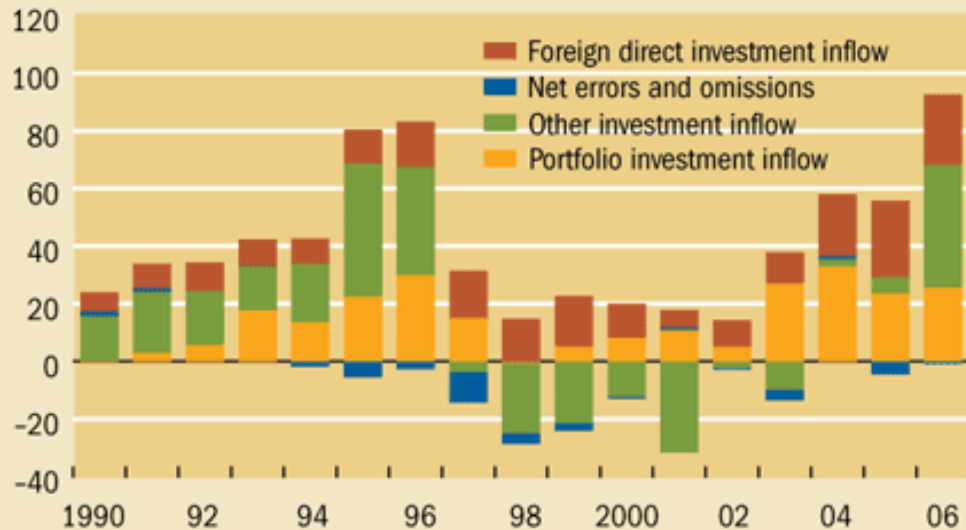
S 2.2 At the beginning, large, unregulated capital inflows before the Asian crisis

Chart 1

Surging capital

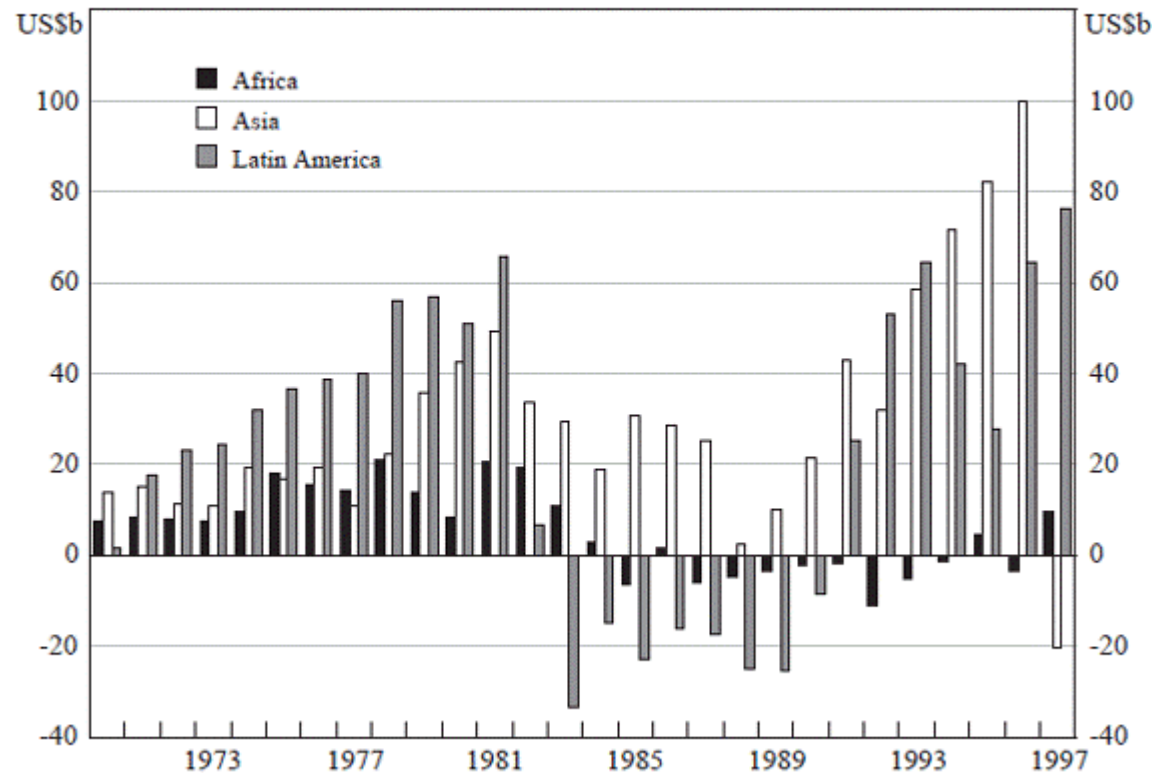
In the two years before the 1997 Asian financial crisis, capital flows into the area increased dramatically.

(billion dollars)



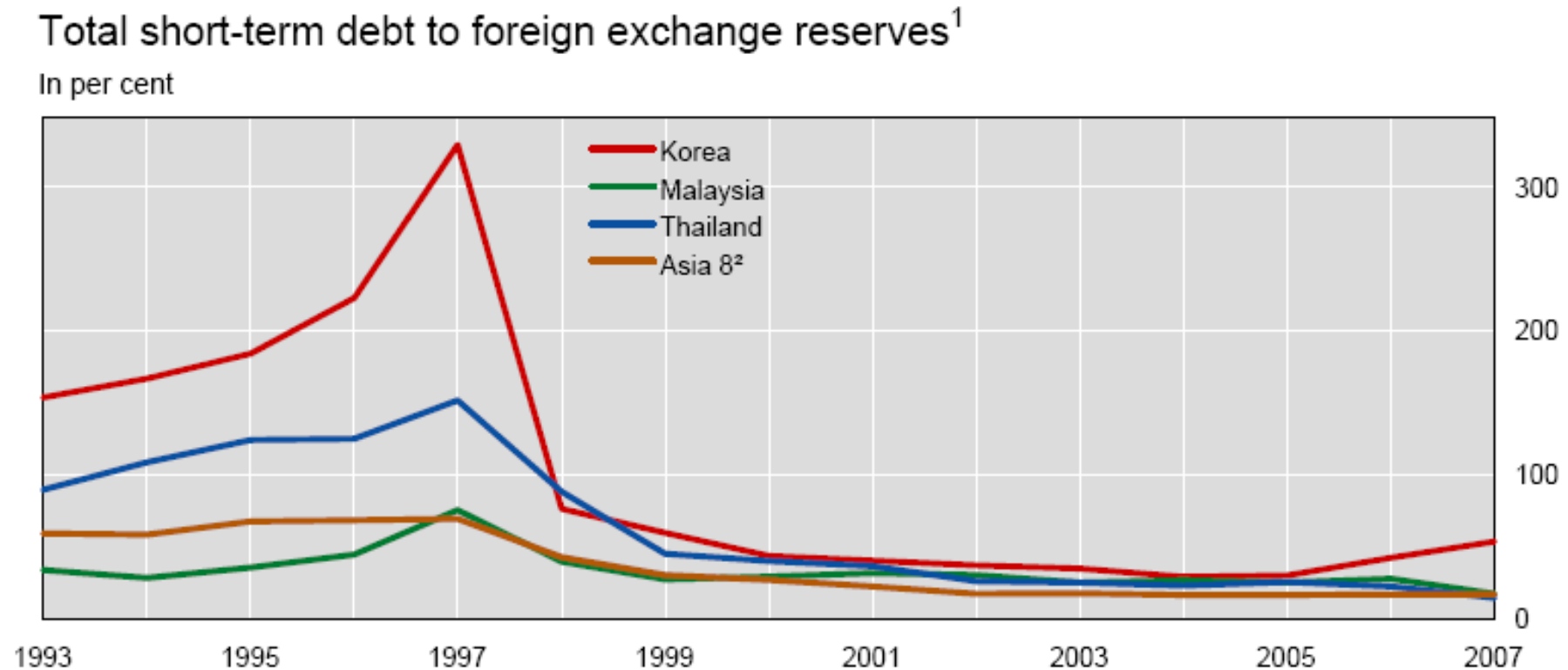
Sources: CEIC; and IMF, *International Financial Statistics*.

Figure 1: Real Net Private Capital Inflows
1997 prices



Source: IMF, *International Financial Statistics*

S 2.2 Capital inflows in form of large ST FX Debt v- a-v available FX CB reserves: vulnerability grows

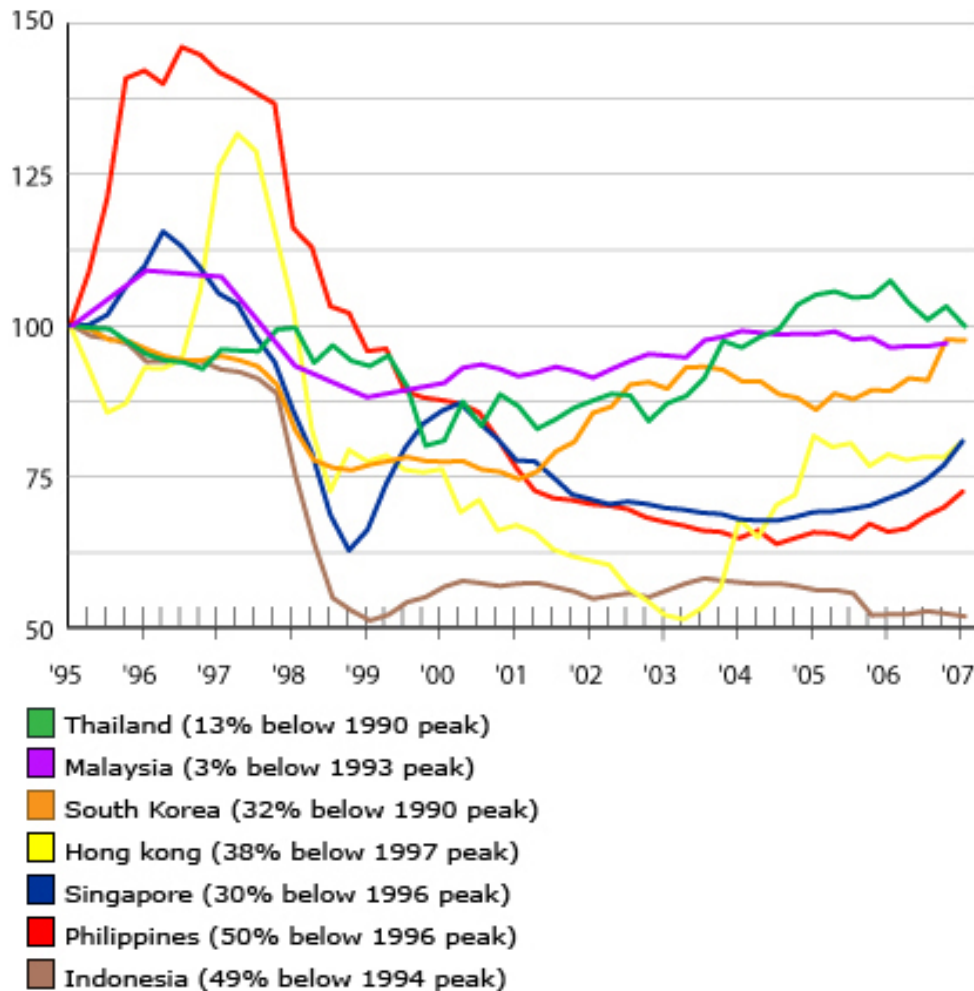


¹ Short-term debt is the sum of such debt in the consolidated banking statistics (Table 9A, column B) and short-term securities (Table 17B); there may be double-counting, but see text regarding short-term debt not included. ² China, India, Indonesia, Korea, Malaysia, the Philippines, Thailand and Taiwan (China).

Sources: IMF; BIS; authors' calculations.

S 2.2 Large inflows affect local real estate

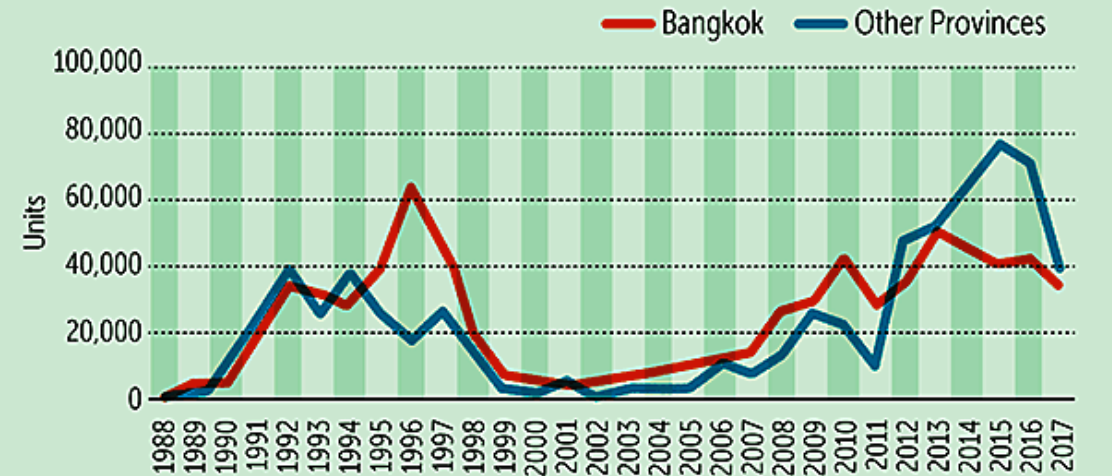
Chart 3. Real House Price Index (1995=100)



Source: Bank of Thailand, Bank Negara Malaysia, Kookmin Bank, RVD, URA, Colliers- Philippines

LONG-TERM VIEW

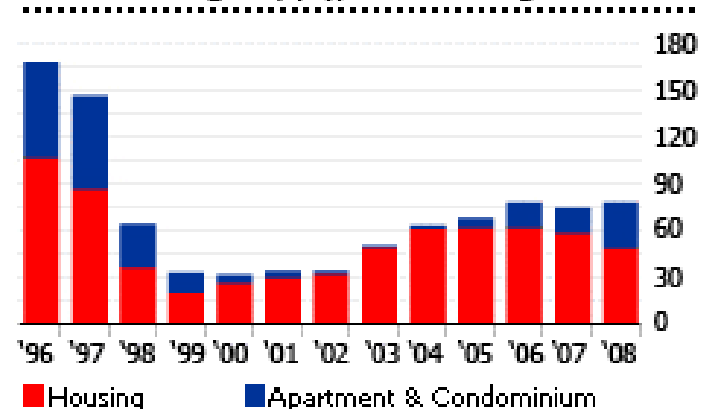
Completed and registered condominium units in Bangkok and other provinces



Source: Land Department

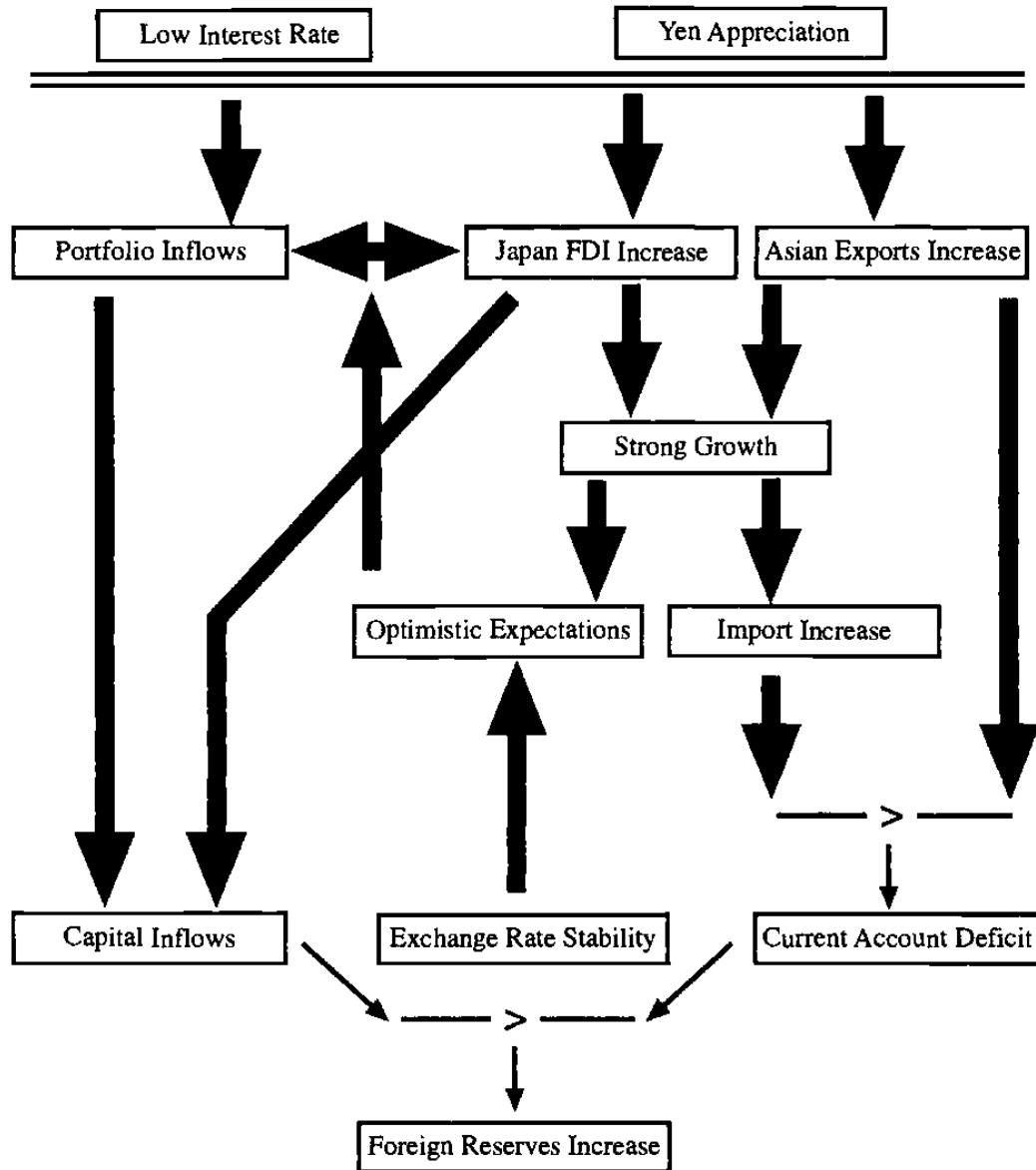
BANGKOK POST GRAPHICS

New Housing Supply, Metro Bangkok

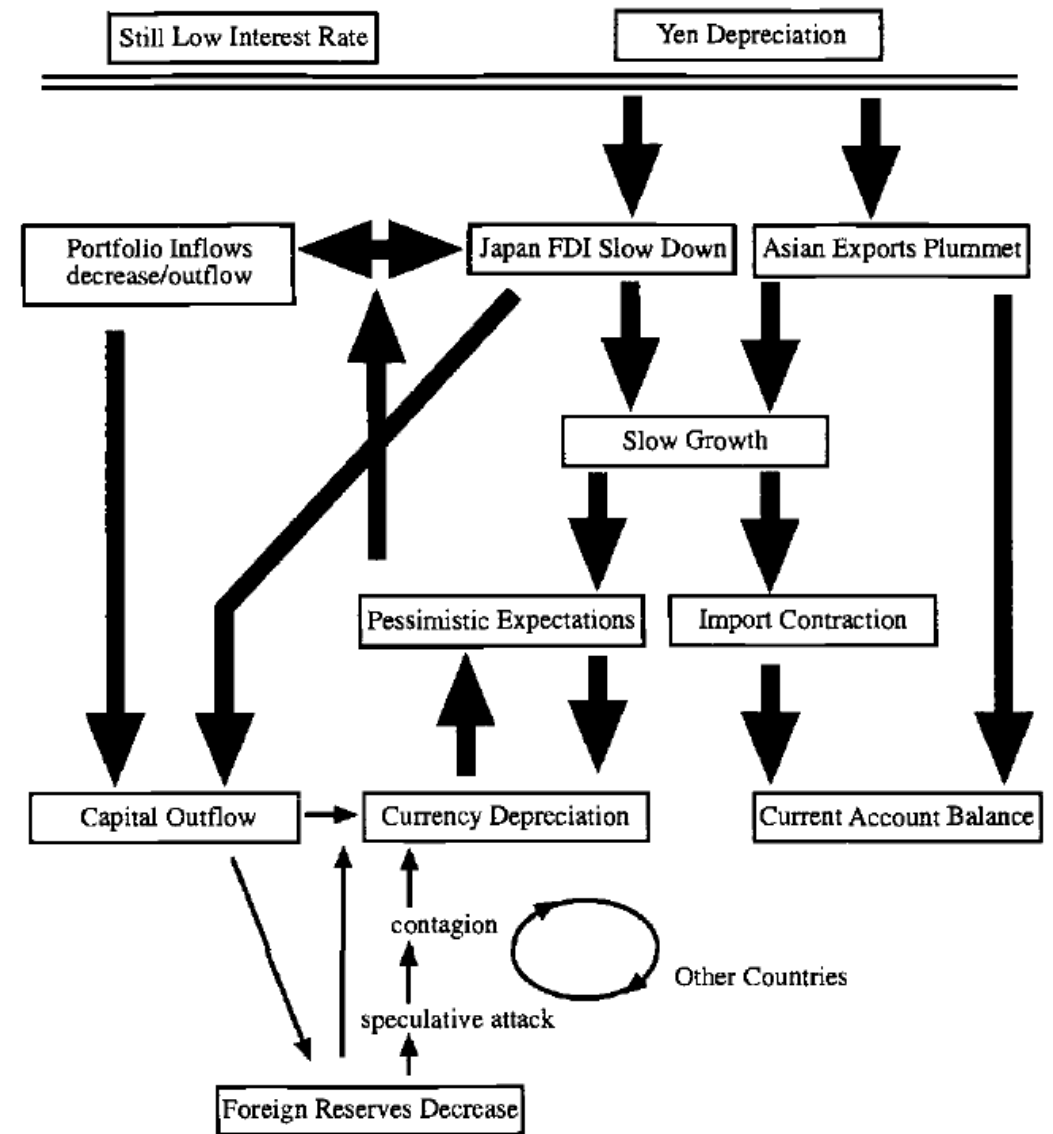


Source: Bank of Thailand

Phase of Capital Inflows



Phase of Capital Outflows



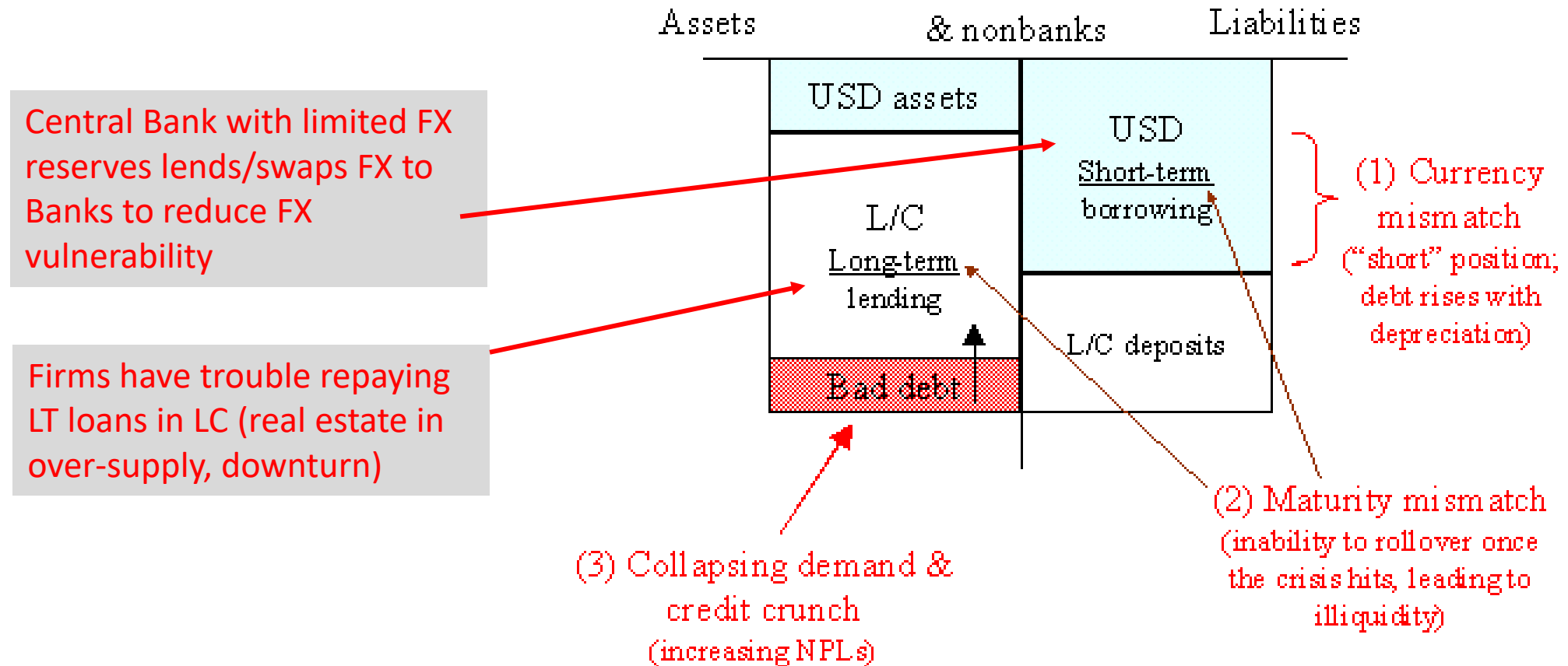
Yen x USD



Source: Refinitiv, as of 7/20/22.

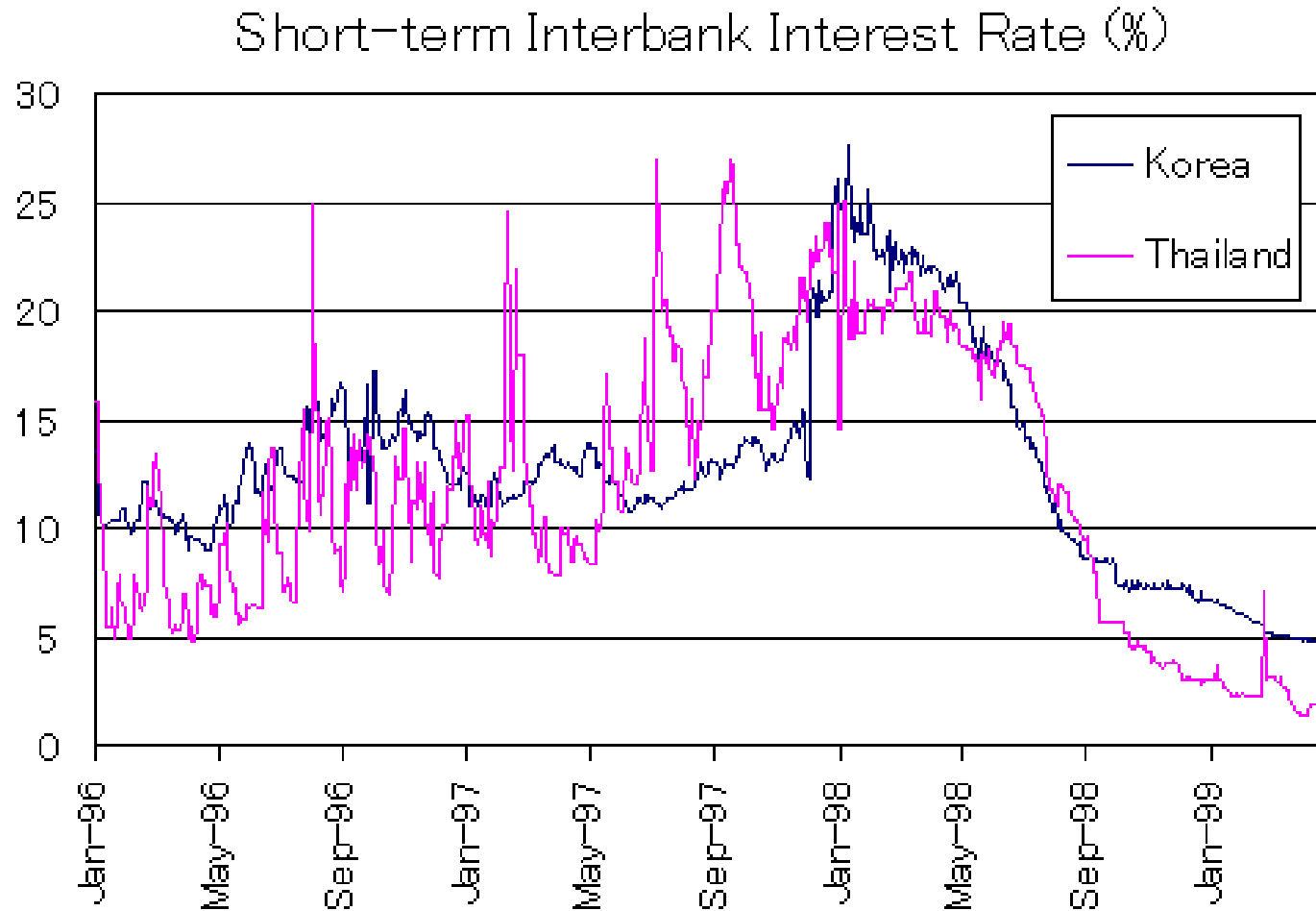
S 2.2 Large inflows & Balance Sheet Vulnerability

Local and Foreign Banks borrow in USD from Foreign Banks (HQ) to finance local exuberant growth and export cycle in East Asia and lend to local firms to conduct their business



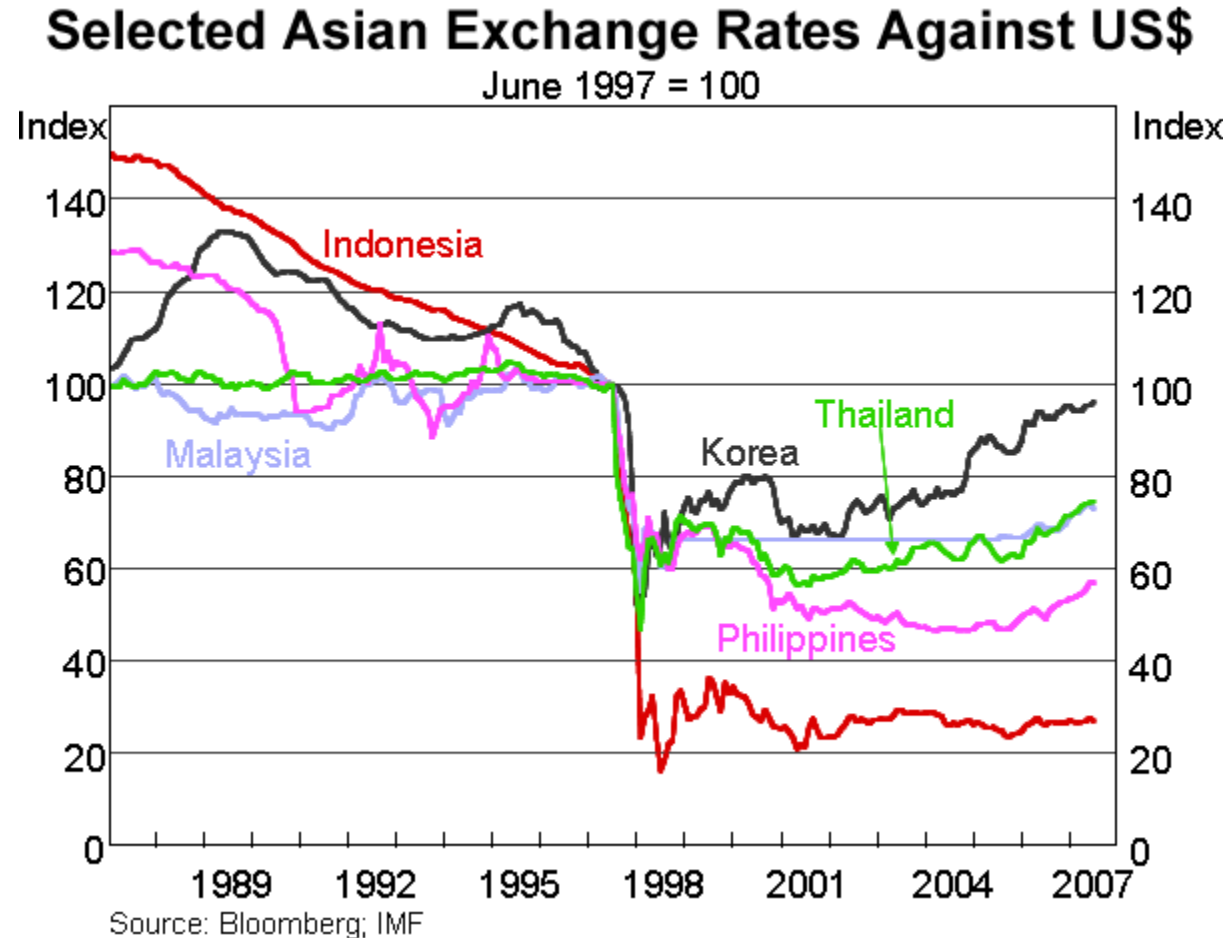
Source: adapted from Ohno and al. (1999)

S 2.2 Repayment needs shoot up interest rate



Source: adapted from Ohno and al. (1999)

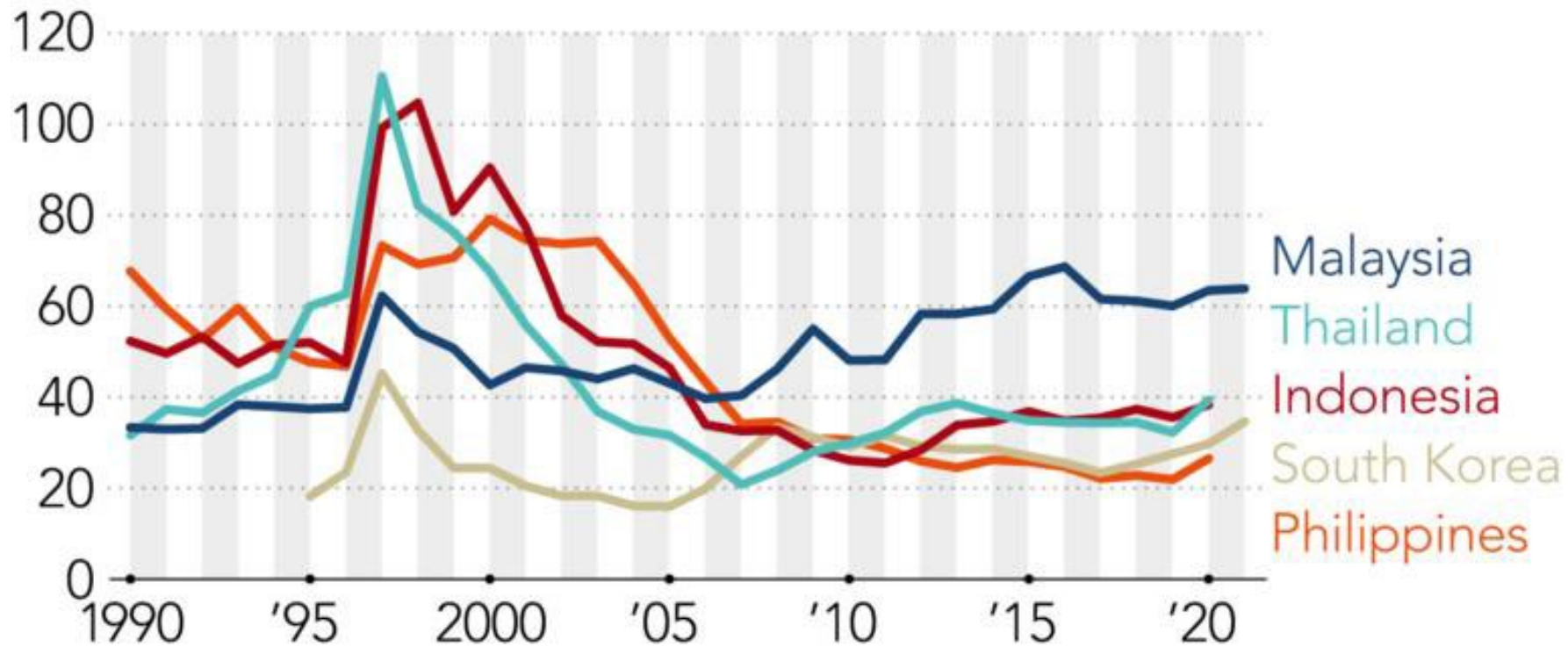
S 2.2 FX debt mismatch brings speculative attack against fixed/pegged ER regime



S 2.2 Excessive external FX debt correction

The 1997 devaluations sparked a debt crisis

(External debt as a percentage of GDP)



Source: Macrobond

S 2.2 Severe recession in real economy (GDP)

Annual growth of GDP per capita, 1995 to 2000

Annual percentage growth rate of GDP per capita based on constant local currency. Aggregates are based on constant 2010 U.S. dollars.

Our World
in Data

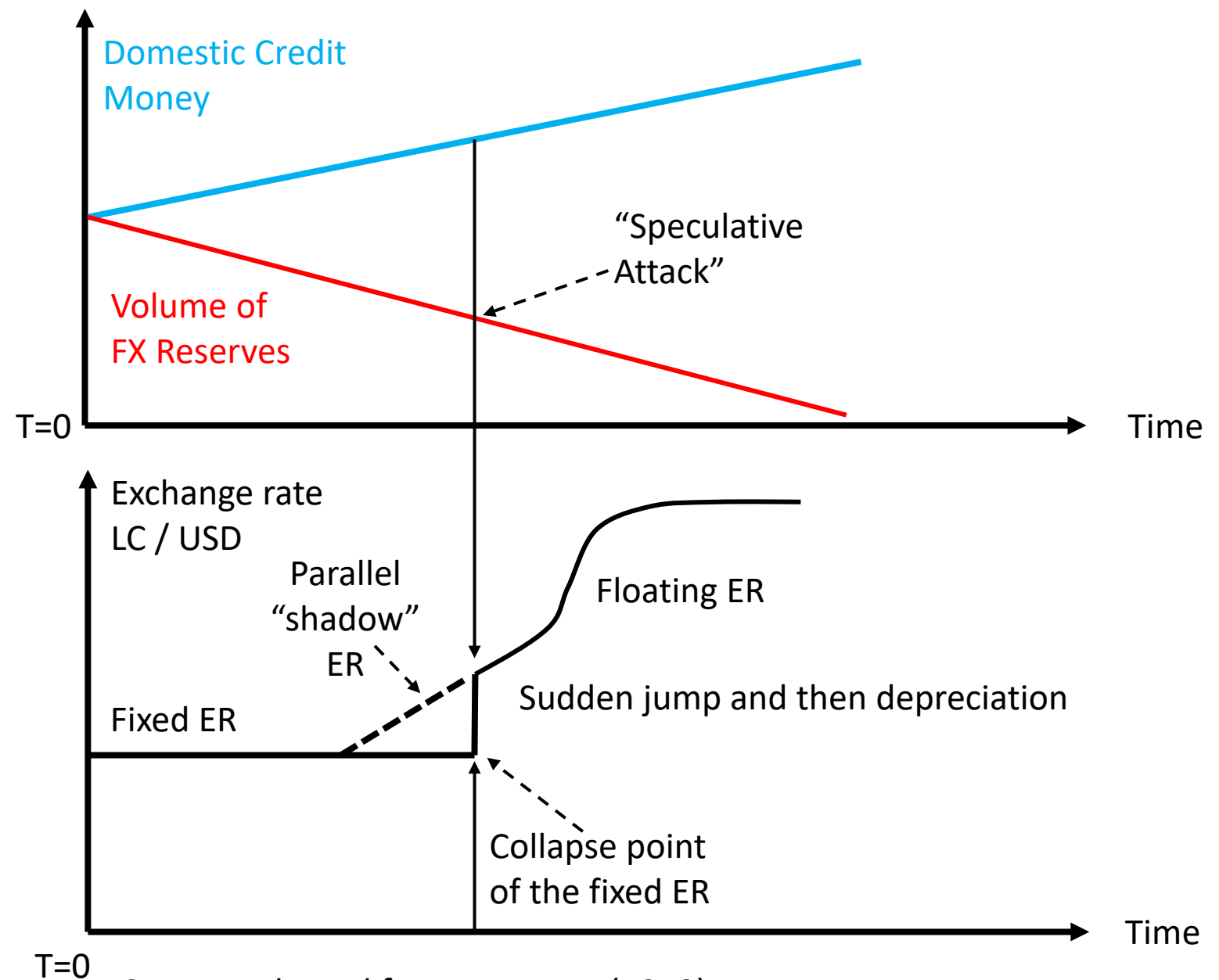


Source: World Bank and OECD

S 2.2.2 Exchange rate crisis Type I and Type II

- First generation ER crisis (Krugman): **fundamentals**
 - CB holds fixed FX reserves under guaranteed fixed ER; Gov conduct expansionary policies; banks finance higher demand for credit in FX and LC
 - Credit expansion fuels bubble (real estate, non-traded goods sector); inflation increases (asset prices and goods & services); turn of cycle: NPLs increase
 - Banks BS under pressure; FX liquidity crisis, request to CB to use FX reserves; interest rate increase; FX depletion triggers speculative attack; full crisis
- Second generation ER crisis model (Obstfeld): **expectations**
 - Difference: CB not fully committed to fixed/pegged ER; can decide to devalue depending on circumstances (too much output loss to defend ERR, hence multiple equilibria; speculative attacks can occur because of self-fulfilling expectations)

- Credit and money (fiscal spending) expand at a fast rate
- Under fixed ER, any LC holdings can potentially be exchanged into FX at any time, at a fixed price
- “Shadow ER” also increase as observers see inconsistency between available FX reserves and fixed ER
- “Speculative attack” occurs **before** the complete depletion of FX reserves, as some “rush to convert LC into FX”
- Depreciation of ER can be abrupt and severe



Source: adapted from Krugman (1979)

The Asian Crisis: Policy Responses

- Stabilization policy type 1 (IMF, Fischer):

<https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp012298>

- Floating and/or de-pegging FX ER; fiscal contraction to avoid inflation and FX
- High short-term interest rates to stabilize FX ER
- Contract domestic banks credit, activity, employment, because TINA
- Interest rates will eventually fall after FX stable, activity rebounds V-shape

- Stabilization type 2 (Stiglitz): <https://core.ac.uk/download/pdf/161443691.pdf>

- Floating and/or de-pegging FX ER; fiscal support to X and C + I to stabilize with minimum unemployment; keep credit flows especially FX credit to X
- Balance-sheet vulnerability worsens with high interest rates and floating FX
- ST bank credit because foreign banks not rolling over; provide unconditional FX safety net

The Asian Crisis: Policy Responses, lessons

- Under IS-LM-BOP-MF framework, still some useful policy recommendations, despite framework limitations:
- Asian crisis different from “macro-populism” (fiscal expansion); credit expansion coming from capital inflows behind crisis;
 - **Lesson 1: surveillance of K inflows and its effects on domestic credit by CB, regulator and supervisor; surveillance of usage of credit (risk of bubbles)**
- CB with fixed FX reserves, fixed ER; opening up capital account without proper regulation of banks;
 - **Lesson 2: prepare financial opening up carefully or delay it; too much FX debt, especially ST will exert pressure on FX; in the absence of speedy global safety nets (IMF), build-up own FX insurance, accumulate FX reserves, local and regional (Chang-Mai accords)**

S 2.4. AI, algorithms, information and “digital” financial crises: the Silicon Valley Bank run

- Missing in IS-LM-BOP-MF: **digital financial innovation, fast payments, new models of bank runs**
- Deregulation of medium-size banks after GFC; loose supervision by regulators, supervisors and CBs
- Balance sheet vulnerabilities: non-insured large deposits (liabilities), re-valuation of assets under FED tightening, big loans to SV start-ups
- Information in new digital age: confidence decline, deposit withdraw, realization of losses, liquidity problems occur much faster
- Speed of new bank run spiral with digital banking; CB intervention; bankruptcy

Classical bank run model (Diamond-Dybwig)

- Banks lend LT (to firms, HH) with long maturity and receive ST deposits (from HH) with short maturity
- Normal times: depositors withdraw small and random; banks keep small fraction in ST liquid assets; can lend LT and make profit of difference in deposit and lending rate
- Stress / crisis time: too many depositors withdraw at same time; LT loans illiquid; banks can sell assets (sometimes losing value); at some point run out of cash; liquidity problem can become insolvency
- Role of CB: if problem is liquidity; Bagehot's rule *to avert panic, central banks should lend early and freely (ie without limit), to solvent firms, against good collateral, and at 'high rates'*

SVB Additional problems in digital era

- **Valuation losses** on safe assets (FED tightening)
 - Bond prices move in inverse fashion to interest rates, called **interest rate risk**. If bond yields decline, the value of bonds already on the market move higher. If bond yields rise, existing bonds lose value.
- **Concentration** of uninsured depositors
 - FDIC threshold set at \$250K maximum to avoid moral hazard; if small number of depositors have large amounts; a few withdrawals can cause liquidity problem
- **Speed of spreading rumors**, information about Banks health and capacity to withdraw deposits
 - Smartphone technology allows today anyone to receive information instantly and take action (withdraw deposits) also instantly

Typical Bank run picture 19th
century: long queuing to withdraw

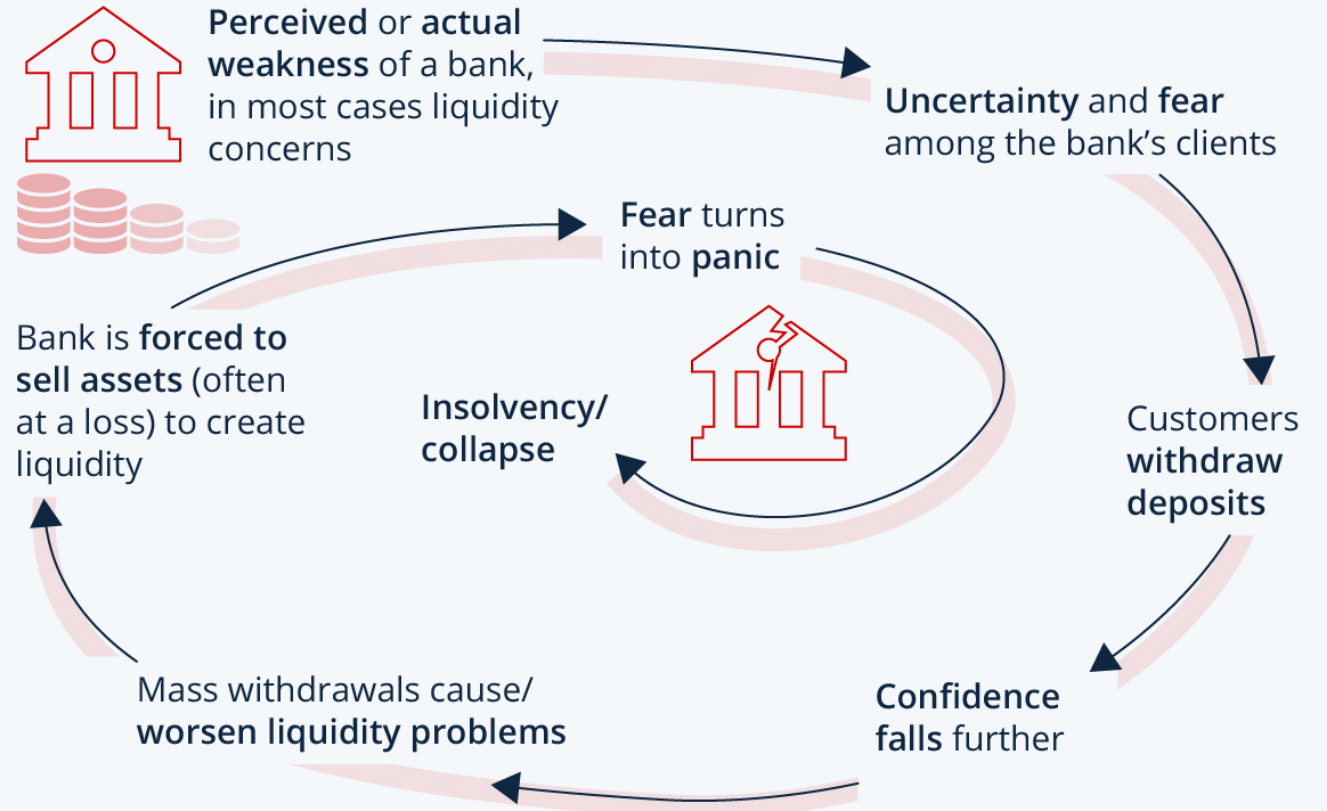


Digital Bank run picture 21st
century: instant withdraw



Bank Runs: When Banks Get Caught in a Spiral of Fear

The negative feedback loop behind many bank failures



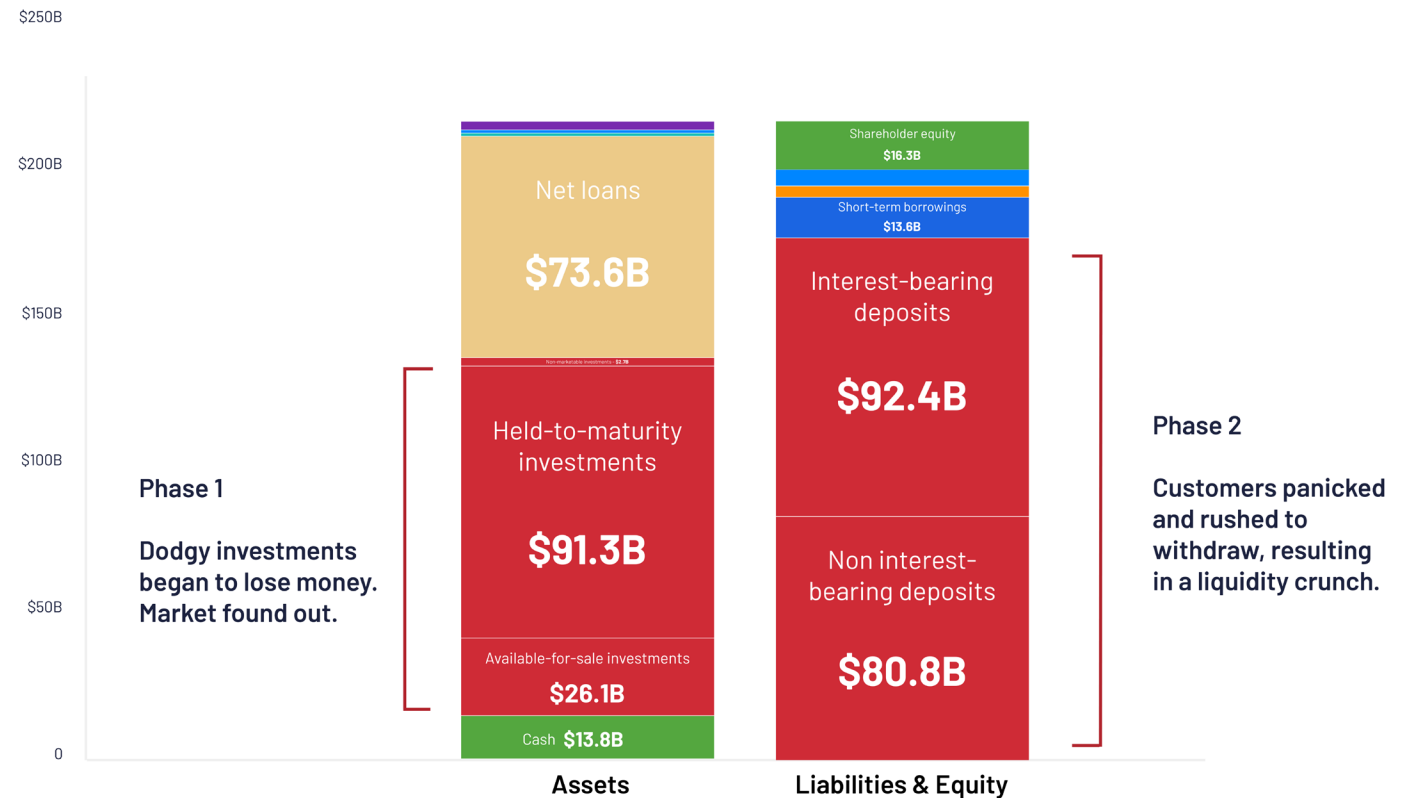
Source: Statista research



SVB: Business Model fragility

- Loans to Silicon Valley start-ups can run into problems
- “Safe assets” (Treasuries) face re-valuation due to FED tightening cycle; selling brings accounting loss
- Rumors start spreading

Balance Sheet Problem at Silicon Valley Bank

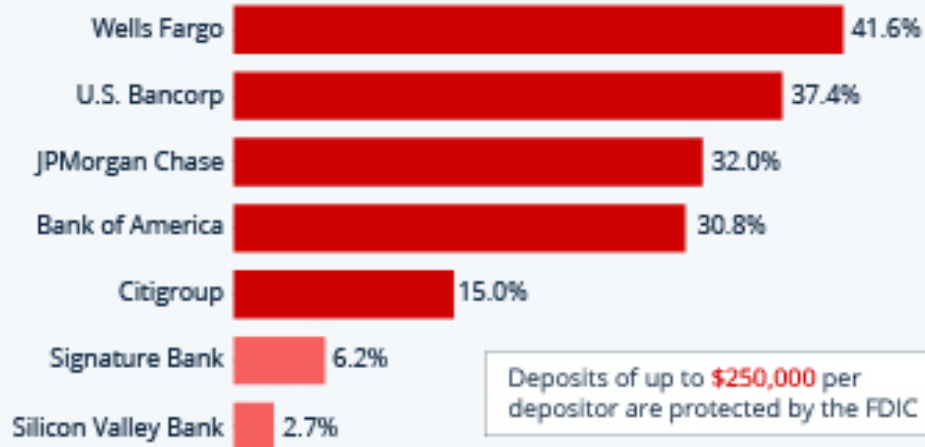


Source: Silicon Valley Bank 2022 December balance sheet

SVB: Balance sheet fragility and depositors concentration

SVB and Signature Were Highly Exposed to Risk of a Bank Run

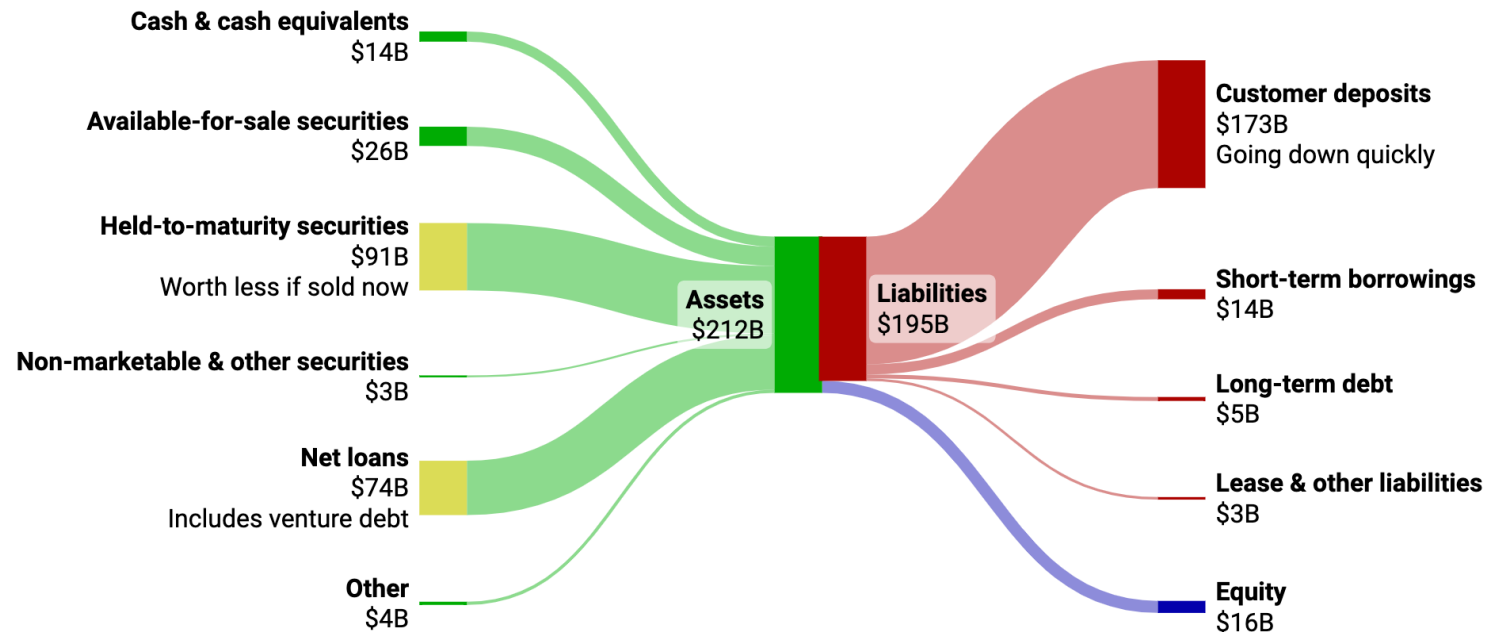
Share of deposits less than \$250,000 as a percentage of total deposits for selected U.S. banks in Q4 2022



Source: S&P Global Market Intelligence

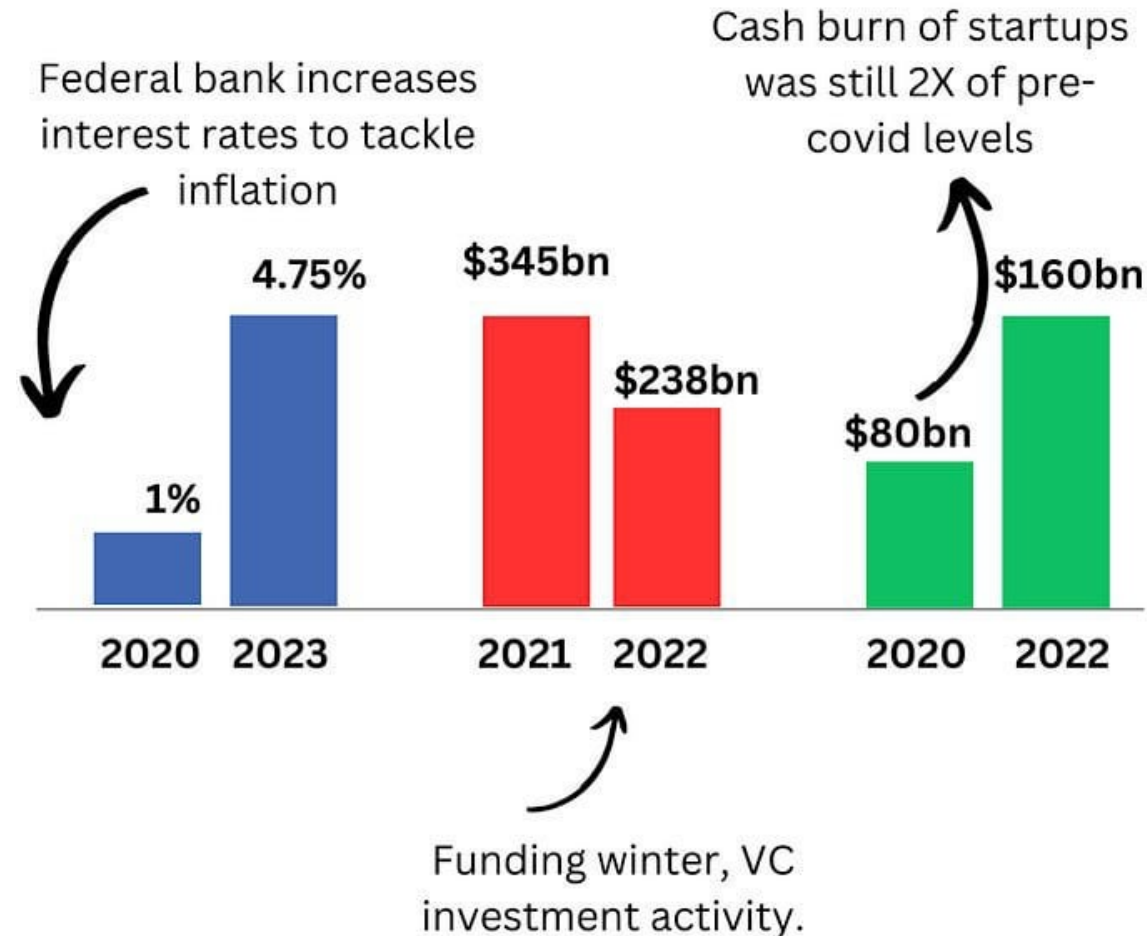
statista

Silicon Valley Bank Balance Sheet (Dec 31 2022)



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SVB: FED Tightening Cycle with “risky clients”



Cash burn rate: how fast a startup spends its cash reserves; it is a financial runway — for how long it can sustain operations before running out of cash = financial health of your startup

Lessons, technology, regulatory and supervision failure

On April 28, FED Vice Chair for Supervision Michael S. Barr released a lengthy review of the Fed's supervision and regulation of SVB. The Fed highlighted four causes of the bank's failure:

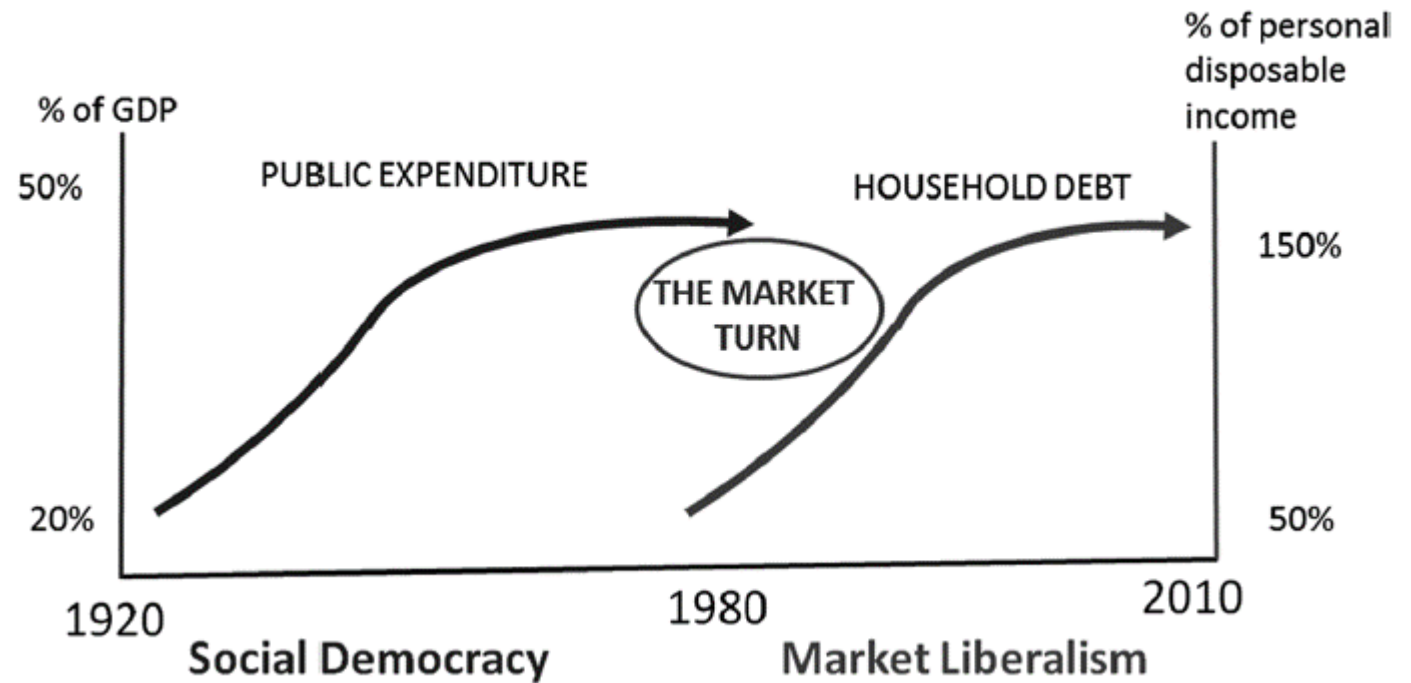
- SVB's board of directors and management failed to manage their risks (eg., lack of a Chief Risk Officer for one year).
- Fed supervisors did not fully appreciate the extent of the vulnerabilities as SVB grew in size and complexity. When supervisors did identify vulnerabilities, they did not take sufficient steps to ensure that SVB fixed those problems quickly enough.
<https://www.federalreserve.gov/publications/2023-April-SVB-Federal-Reserve-Supervision.htm>
- Failed regulation ? The 2018 law—the Economic Growth, Regulatory Relief, and Consumer Protection Act, lightened the oversight of some mid-sized banks— still SVB was quite large (over \$200b total assets).
- Failed supervision? Despite identified problems, no action by supervisors.
<https://oversight.house.gov/release/hearing-wrap-up-silicon-valley-bank-collapse-is-a-case-of-failed-supervision/>

Conclusions of Crises reviewed in Session 2

- S 2.1. **Macroeconomic populism facilitated by** the role of monetary –CB financing of fiscal deficits; CB to avoid be under fiscal dominance
- S 2.2. **Too much Capital Flows under Fixed Exchange Rate** produces too much Credit and lead to the Asian type of Crisis; CB to regulate and supervise opening up capital account and where FX loan go in the economy
- S 2.4 Financial technologies, AI, algorithms can produce new **“Digital” financial crises like** the SVB bank run; CB to provide liquidity, deposit insurance but play better role of regulator and supervisor in digital age

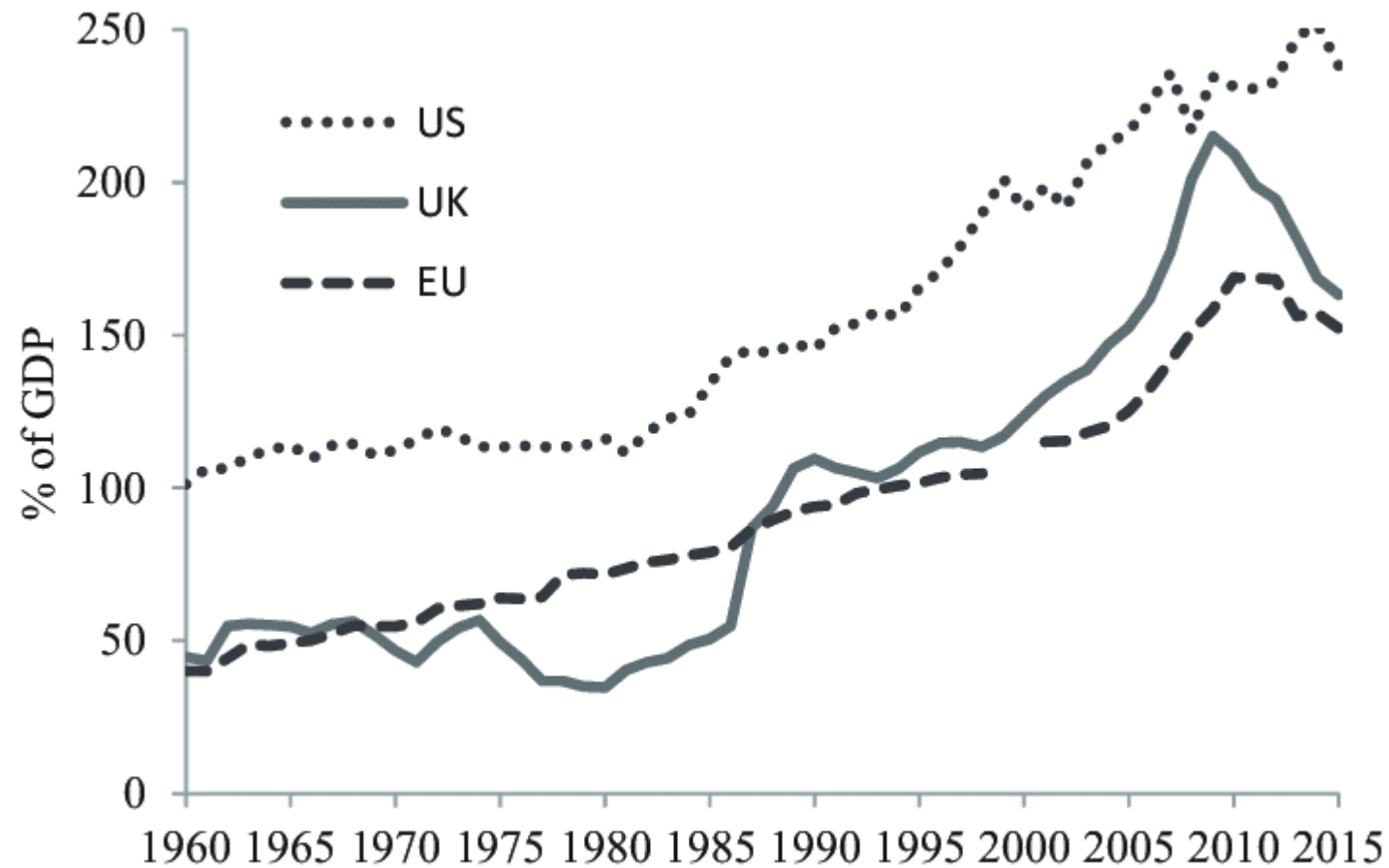
Crises not just economics-financial, politics too

- Crisis usually the by-product not just of economics-financial developments but of politics too
- Mid-20th mostly fiscal crisis (excess spending, macropopulism) due to increased usage of fiscal expansionary policies that became unsustainable because of taxation limits, debt limits and inflationary consequences
- Political economy solutions to manage social demands shifted to “credit” and “financial assets”, with less reliance on budgets and more on financial institutions, banks, pension funds and therefore a rise in private debt



Crises not just economics-financial, politics too

- Rise in private credit could be seen as “credit populism”, i.e. bi-partisan views that credit expansion was desirable (smooth business cycles) irrespective of risks
- Expansion helped quite a lot by Global financialization; that allowed a new socio-political arrangement; consumption smoothing, patching social tension
- CBs helped with controlling inflation, keeping low interest rate)
- CBs did not end up being the “only game in town” after the GFC, this feature has been present before, when CB were at the “service” of Treasuries, not only in EMEs (classical cases) but also in many AE (eg., the Nixon relation with FED Chair Burns), not immune from politics (despite so-called “independence”)



Where is the political angle?

- Macro populism: “leftist” Gov want to satisfy popular electoral base immediately; disregard supply constraint; minimize risks; antagonize investors; CB oblige with deficit financing; disregard inflation risks. Hell is paved with good intentions
- Asian crisis: large international banks want to ride and take profit on the growth of the Asian tigers; excess lending despite mounting risks; local Govs keep fixed ER as guarantor of stability; disregard currency mismatch of debt; when crisis hit, no space for Asian Monetary Fund, US puts weight on IMF as only global safety net
- SVB run: supervisors and regulators fail; lightens supervision limits to large medium size banks; concentration of deposits above FDIC insurance limit; then relax maximum \$250K insurance; moral hazard; lack of action v-a-v interest rate risk mounting in large (over \$200b asset bank)

S2 References

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Question to ChatGPT: Can you avoid financial crisis? Answer (1/2):

While it's not possible to completely avoid all financial crises, there are steps that individuals, businesses, and governments can take to mitigate their impact and reduce the likelihood of them occurring:

- **Diversification:** Diversifying investments across different asset classes, industries, and geographic regions can help reduce risk. This means not putting all your eggs in one basket.
- **Risk Management:** Understanding and managing risk is crucial. This involves assessing potential risks and taking appropriate measures to mitigate them, such as purchasing insurance or hedging against market fluctuations.
- **Financial Planning:** Creating a solid financial plan that includes budgeting, saving, and investing for the long term can help individuals and businesses weather economic downturns.
- **Regulation and Oversight:** Governments and regulatory bodies can implement and enforce regulations to prevent excessive risk-taking and ensure the stability of financial markets.

Question to ChatGPT: Can you avoid financial crisis? Answer (2/2):

- **Transparency and Accountability:** Transparency in financial markets and institutions, along with accountability for unethical or risky behavior, can help prevent the buildup of systemic risks.
- **Monitoring and Early Warning Systems:** Developing mechanisms to monitor economic indicators and identify emerging risks can allow for early intervention to prevent crises from escalating.
- **Emergency Preparedness:** Having contingency plans in place for various economic scenarios can help mitigate the impact of financial crises and facilitate a quicker recovery.
- **Education and Awareness:** Increasing financial literacy among individuals and businesses can empower them to make informed decisions and better navigate economic challenges.

While these measures can help reduce the likelihood and severity of financial crises, it's important to recognize that some level of risk is inherent in any economic system. Additionally, unexpected events and external factors can sometimes lead to crises despite preventive efforts.

	First generation models	Second generation models	Third generation models
<i>Main creators</i>	P. Krugman; P.Garber; R.Flood.	M. Obsfeld; A. Calvo; A. Rose; A.Velasco; S. Morris.	A.Rose , B.Eichengreen, M. Obstfeld.
<i>Main economic indicators</i>	Fiscal deficit/GDP; Real money quantity; M1 balance surplus.	Export; Import; Real exchange rate; Trade terms; Production; Real interest rate.	Domestic credit/nominal GDP M2/ international reserves; M2 multiplier; Share prices; Deposits; Banking crises.
<i>Main properties</i>	Focus on long run; Unique equilibrium; Government deficit monetarization is the cause of speculative attack against the national currency.	Focus on short run; Multiple equilibrium; Currency crisis largely depends on speculators expectations.	These models already allow to establish how monetary policy can impact the currency crises and to explain the causes why crises spread across the countries.

Source: Indre DeksnYTE

S 2.1.2. Macroeconomic populism Brazil: fiscal deficit its monetary financing (1980s-90s)

