FINANCIAL CRISES · CASE STUDY

Brazil 1999

The Samba Effect

From peg defense to the macroeconomic tripod

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Brazil's 1999 crisis, in one slide

~50%

depreciation of the real against the dollar within weeks of the Jan 15, 1999 float.

$41.5B

IMF precautionary package (Nov 1998) — largely unused, but a credibility signal.

8.9%

inflation in 1999 — contained despite the devaluation, thanks to inflation targeting.

4.4%

GDP growth in 2000 — V-shaped recovery, no banking collapse, no lost decade.

Bottom line: Brazil exited its currency peg early, absorbed the shock, and rebuilt around a credible policy framework — turning a crisis into a 20-year regime change.

Why study Brazil 1999?

> *Brazil and Argentina entered the late 1990s with the same disease — overvalued pegs, twin deficits, and external dependence. Why did one escape and the other collapse?*

WHAT

An emerging-market currency crisis triggered by contagion and self-fulfilling expectations.

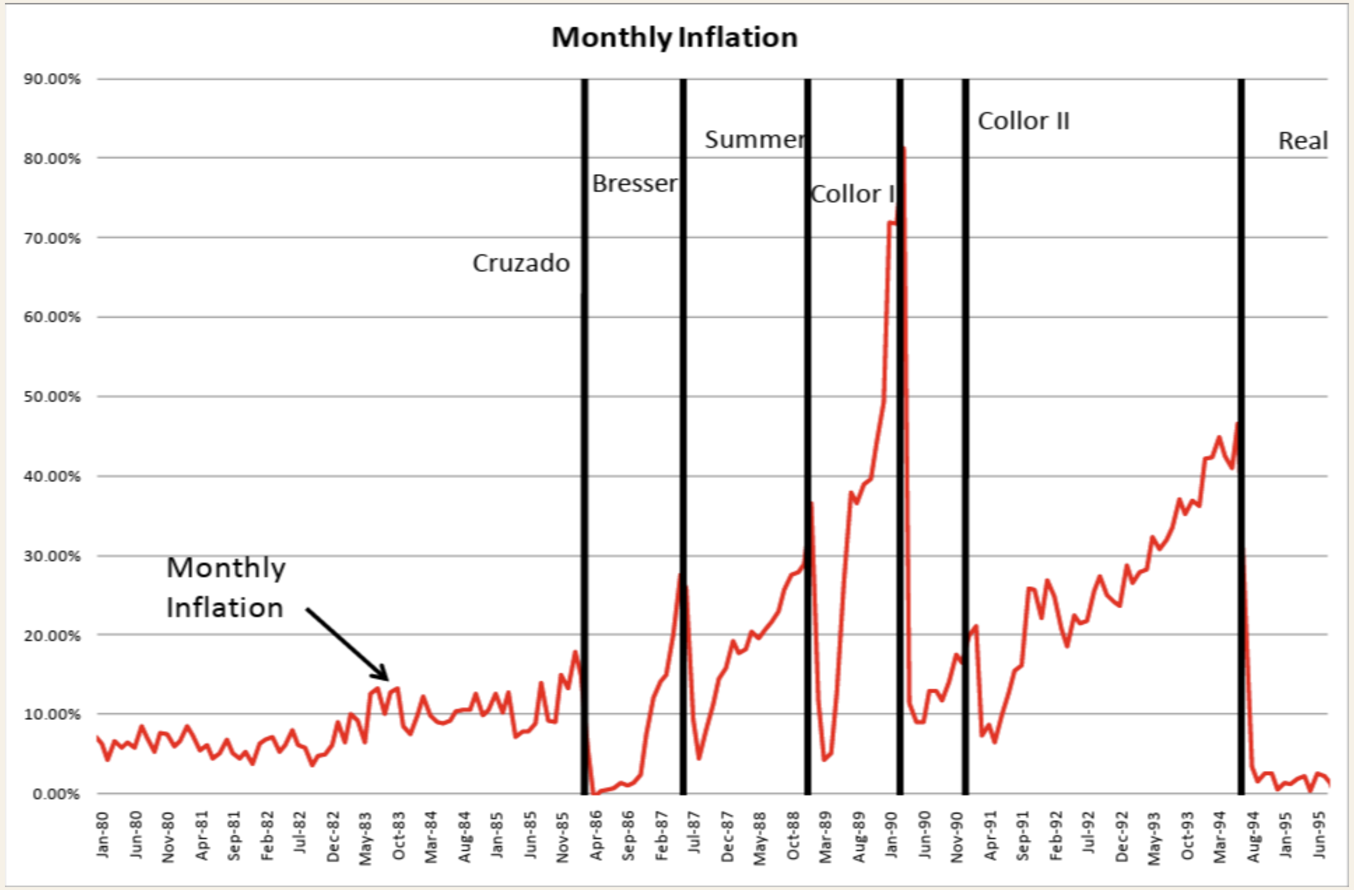
HOW

Trace the run-up, the policy choices, and the response that built the macroeconomic tripod.

WHY IT MATTERS

Brazil 1999 is the textbook case of crisis-spurred reform in EM macroeconomics.

A decade of failed stabilization plans



Brazil monthly inflation, 1980 – Jul 1994

1986 Cruzado

Price/wage freeze, new currency — no fiscal reform.

1987 Bresser

Price freeze + partial indexation — fiscal target missed.

1989 Summer

De-indexation attempt — Congress blocked reforms.

1990 Collor I

Froze 80% of deposits — short-lived gains.

1991 Collor II

Spending cuts reversed by the courts.

Common diagnosis: every plan used price freezes and monetary tools but skipped fiscal reform. · Source: Garcia, Guillén & Kehoe (2014).

The Real Plan (1994) — what worked, what it hid

What it fixed

Hyperinflation broken

URV (unit of real value) used to break inflation inertia before the new currency.

Credible anchor

Real pegged to USD via a crawling band — investors had a clear nominal target.

Capital inflows

Strong inflows financed imports and lifted reserves through 1995–97.

What it hid

Currency overvaluation

The semi-fixed rate became progressively misaligned with fundamentals.

Current account deficit

Imports surged; the CA gap widened to ~4% of GDP by 1998.

Persistent fiscal deficits

Federal and subnational deficits left no buffer for shocks.

Source: Lopes (2020); Banco Central do Brasil.

How currency crises happen — three generations

1ST GEN

Fundamentals (Krugman)

Persistent fiscal deficits monetized → reserves drain → peg breaks once reserves hit a floor. Crisis is inevitable, not contingent.

2ND GEN

Self-fulfilling (Obstfeld)

Even fundamentally sound pegs can collapse if markets believe defense will be abandoned. Multiple equilibria; expectations are the trigger.

3RD GEN

Balance-sheet & contagion

Currency mismatch in bank/sovereign balance sheets transforms a devaluation into a banking crisis. Contagion spreads via correlated EM positions.

Brazil 1999 had elements of all three: real fiscal weakness (1st), a self-fulfilling speculative attack after Russia (2nd), and contagion-driven capital flight (3rd) — making it the 'sudden stop' archetype Cavallo describes.

Sources: Course frameworks (Cavallo, Class 4 · 9); Brunnermeier & Reis (2023).

Five vulnerabilities waiting for a spark

01	**Chronic fiscal deficits**	Federal and state deficits persisted even in boom years — no automatic stabilizer.
02	**Short-term domestic debt**	Public debt indexed to overnight rates — every interest-rate hike became a fiscal shock.
03	**Subnational fiscal crises**	States like Minas Gerais accumulated unsustainable debt before federal reform.
04	**External financing dependence**	Current account gap covered by short-term capital — reversible at the first shock.
05	**Currency-mismatched banks**	Banks held dollar liabilities against real assets — classic 3rd-gen exposure.

Source: Garcia, Guillén & Kehoe (2014).

Contagion from Asia and Russia (1997 – 1998)

Jul 1997

Thai baht collapses

Asian financial crisis begins; EM risk premia spike worldwide.

Oct 1997

Hong Kong attacked

Brazil raises Selic to 43% to defend the real; reserves drop.

Aug 1998

Russia defaults

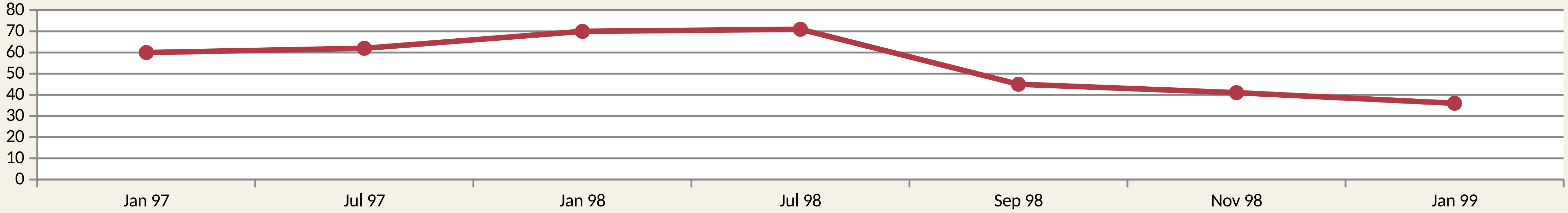
Investor panic; LTCM collapses; flight from all EM debt.

Nov 1998

IMF rescue announced

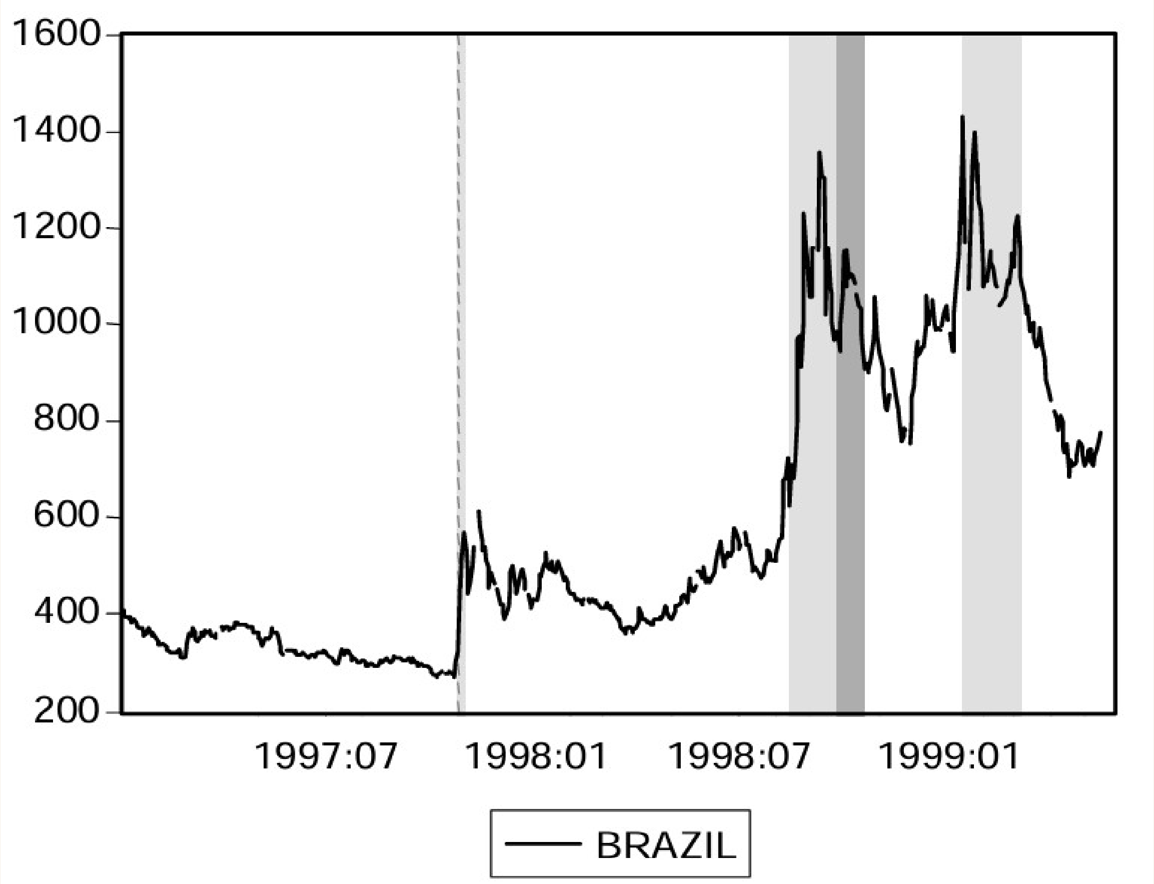
$41.5B precautionary package — a credibility shield, not yet a bailout.

Brazil international reserves, USD bn



Source: World Bank, Total Reserves (incl. gold) – Brazil; IMF Article IV reports.

When defense becomes impossible



Brazil EMBI bond spread, Jan 1997 – May 1999 (basis points)

Source: Dungey et al. (2002); Banco Central do Brasil.

The self-fulfilling spiral

1. **Doubt**

   After Russia, markets question whether Brazil will sacrifice growth to defend the real.

2. **Pressure**

   Spreads blow out to >1,400 bp; Brazil hikes Selic to 45%, deepening fiscal stress.

3. **Trigger**

   Cost of defense exceeds perceived benefit; Minas Gerais default (Jan 13) lights the fuse.

4. **Collapse**

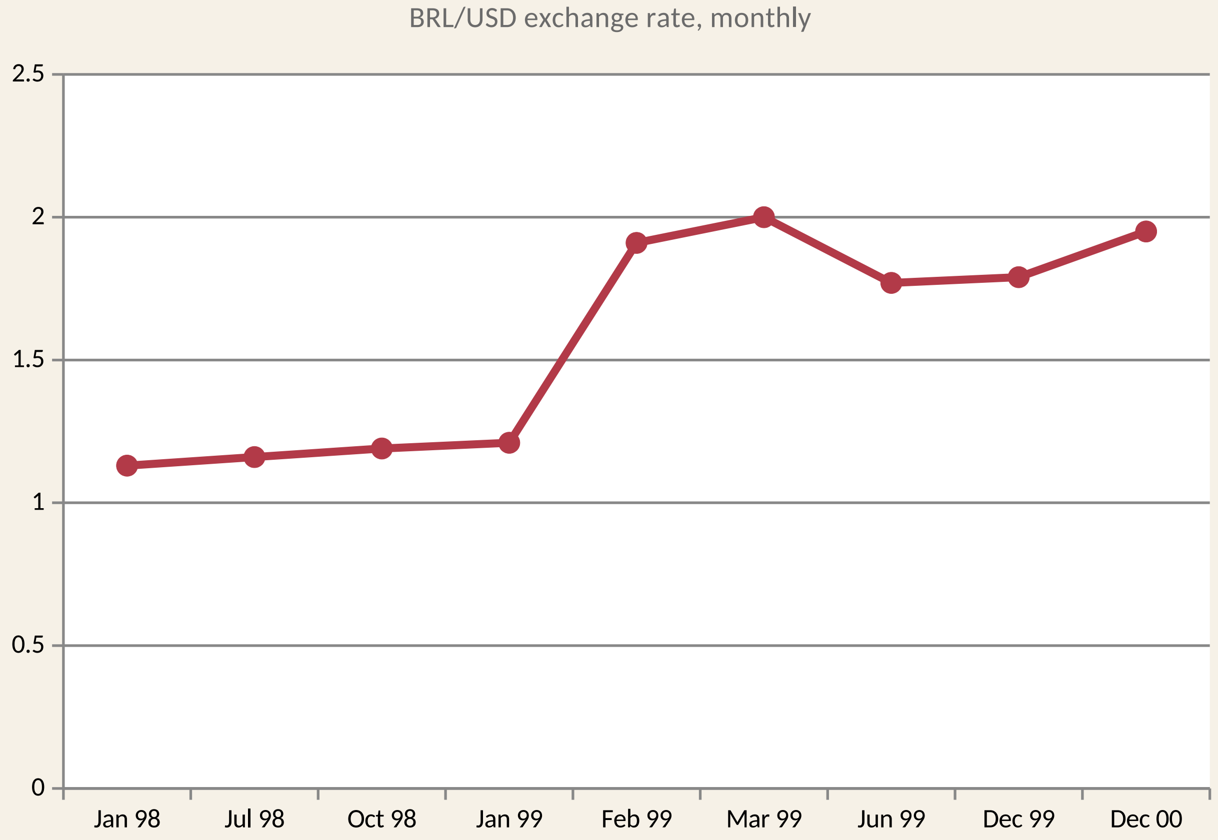
   Selling cascade makes the peg defense impossible — a textbook 2nd-gen Obstfeld attack.

Six days in January 1999

Jan 6	Minas Gerais governor announces 90-day moratorium on debt to federal government.
Jan 13	Central Bank widens the currency band — markets read it as a controlled devaluation.
Jan 14	Reserves drain $1.2 B in a single day; Selic raised to 41%.
Jan 15	Central Bank abandons the band entirely. Real floats — and falls.
Late Jan	Real depreciates from R$1.21 to R$1.83 per USD (~50%). Capital outflows continue.
Feb 1999	Arminio Fraga appointed BCB president — credibility play; inflation targeting drafted.

Sources: IMF (1999); Fraga (2000); Banco Central do Brasil chronology.

The shock — sharp, but short



+50%

Imported inflation pulse

Pass-through of devaluation lifted CPI sharply in Q1 1999.

-0.2%

Recession (mild)

Q1 1999 GDP contracted; full-year growth still positive at 0.3%.

8.9%

Inflation contained

Versus expectations of >20%; new inflation-targeting anchor held.

Sources: World Bank WDI; IBGE; Banco Central do Brasil.

The Macroeconomic Tripod

LEG 1

Floating exchange rate

Jan 1999

Real allowed to find its level. Removes the one-way bet against the central bank.

Restores monetary policy autonomy.

LEG 2

Inflation targeting

Jun 1999

BCB adopts explicit CPI targets with quarterly Inflation Reports and Copom minutes.

Anchors expectations; replaces lost peg credibility.

LEG 3

Fiscal Responsibility Law

May 2000

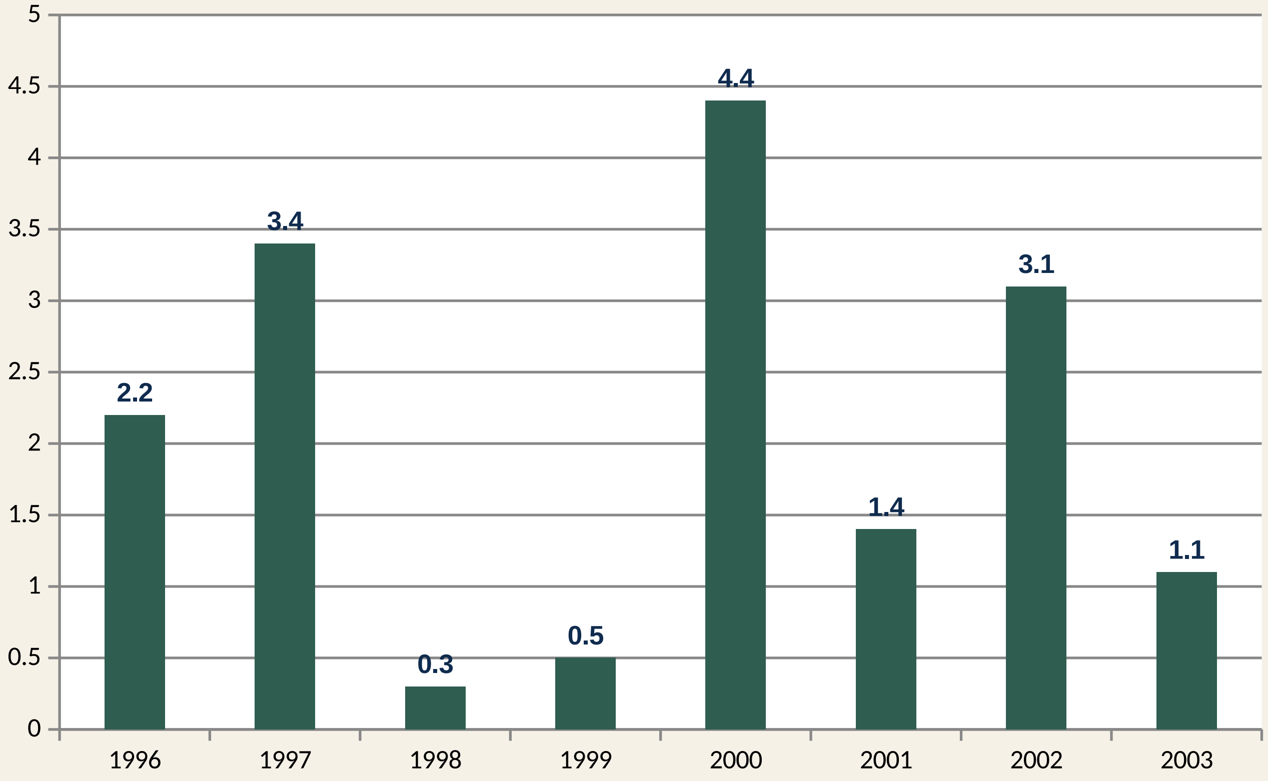
Caps subnational debt and personnel spending; binds federal, state, and municipal governments.

Locks in primary surpluses; ends fiscal-monetary dominance.

The three legs are mutually reinforcing: floating rate gives monetary policy room; inflation targeting anchors it; fiscal rule prevents the cycle from restarting.

A V-shaped recovery, not a lost decade

Brazil real GDP growth, % (annual)



Inflation (1999)	**8.9%**	*vs. >20% feared*
GDP growth (2000)	**4.4%**	*fastest since 1995*
FDI inflows	**Up sharply**	*covered the CA gap*
Banking sector	**Stable**	*no twin crisis*
IMF funds drawn	**Limited**	*mostly precautionary*

Source: World Bank WDI; IBGE; Banco Central do Brasil.

Brazil vs Argentina — same disease, different cure

Both nations used currency anchors to tame inflation. One devalued early and rebuilt; the other defended too long and collapsed.

	BRAZIL ✓	ARGENTINA ✗
Currency regime	Crawling peg (1994). Abandoned Jan 1999 — float adopted early.	Currency board: 1 peso = 1 dollar (1991). Held until Dec 2001 collapse.
Fiscal policy	Fiscal Responsibility Law (2000); primary surplus 3–4% of GDP by 2001.	Persistent deficits; dollar-denominated sovereign debt with no buffer.
IMF role	$41.5B (1998) — largely unused; served as a credibility signal.	Repeated programs through 2001; IMF later called the 2001 program 'mistaken.'
Outcome	Short recession; 0.3% growth in 1999, 4.4% in 2000. Model for EM.	Largest sovereign default in history; banking system frozen 10 months; 5 presidents in 2 weeks.

Source: Tarullo, D.K. (2002), The IMF and the Lessons from Argentina and Brazil. AEI.

Five lessons for emerging-market policy

01 **Pegs are durable only with fiscal discipline.**

Anchoring monetary policy with an exchange rate fails if fiscal deficits feed expected devaluation.

02 **Exit early; defending too long is the costlier path.**

Brazil's short, sharp devaluation cost less than Argentina's three more years of denial.

03 **Inflation targeting can replace a lost nominal anchor.**

Transparency and a credible target re-anchor expectations after a peg breaks.

04 **IMF support is credibility, not cash.**

Brazil drew little of the $41.5B but used the package to signal commitment.

05 **Crises can spur reforms — if institutions exist to lock them in.**

The Fiscal Responsibility Law (2000) made the post-crisis tripod stick.

THANK YOU

From peg defense to the macroeconomic tripod

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