

Monetary and Fiscal History of Peru 1960-2017

Radical Policy Experiments, Inflation and Stabilization

César Martinelli¹ Marco Vega²

¹George Mason University

²Central Bank of Peru and PUCP

Disclaimer: The views expressed here are those of the authors and do not necessarily represent those of their institutions.

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- 1 Overview
- 2 Growth accounting
- 3 Fiscal accounting, public debt and seigniorage
- 4 The onset of inflation
- 5 Supply shocks, policy follies and hyperinflation
- 6 Stabilization and its aftermath
- 7 Conclusions

Overview

- Inflation in Peru in the last half century
 - ▶ history of low inflation with periodic bouts of two digit inflation
 - ▶ chronic, accelerating inflation since the mid 1970s
 - ▶ hyperinflation in the second half of the 1980s
 - ▶ successful stabilization of the 1990s

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- hyper stagflation: hyperinflation accompanied by great depression

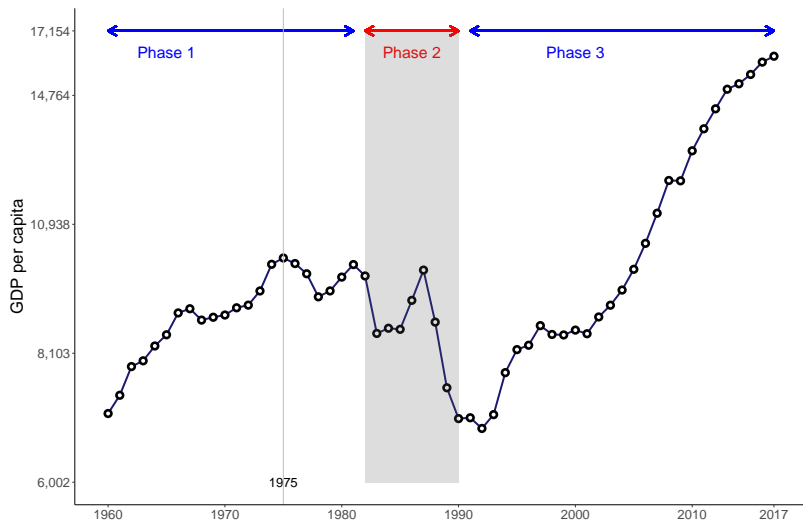
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 - ▶ inflation before 1990 reflects the fiscal need for inflationary taxation
 - ▶ stabilization corresponded to a fall in seigniorage to negligible levels consistent with regime change

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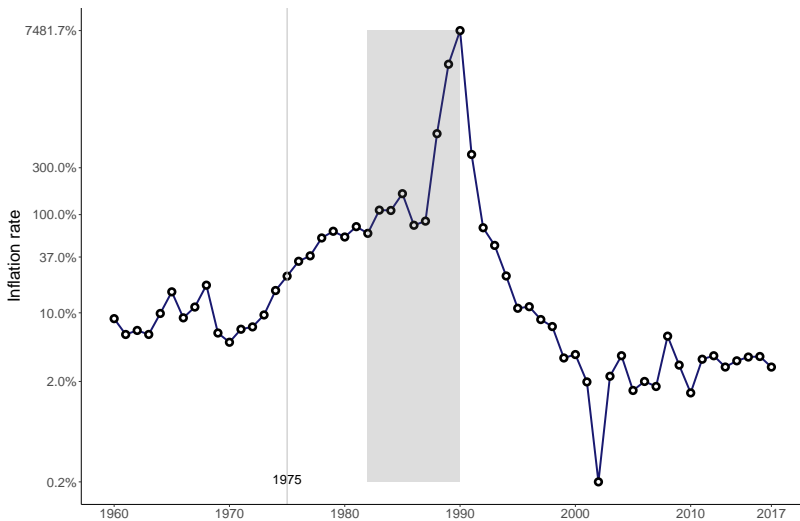
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- political economy: why were those policies adopted?

The big supply shock

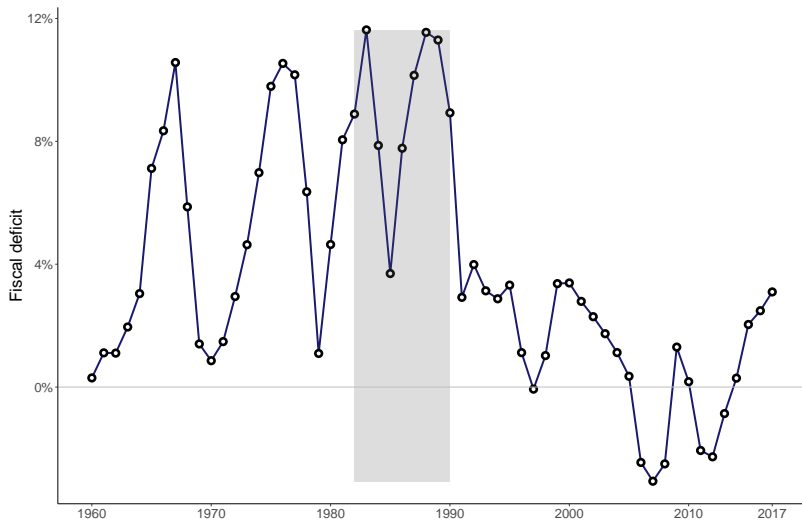


Inflation

logarithmic scale



Fiscal deficit



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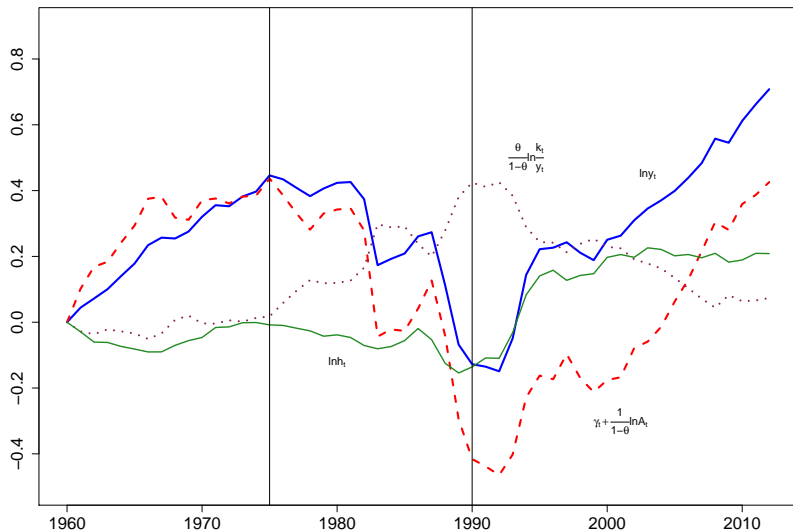
Growth accounting

Great depressions (Kehoe and Prescott)

$$\ln y_t = (\gamma - 1)t + \frac{1}{1 - \theta} \ln A_t + \frac{\theta}{1 - \theta} \ln(k_t/y_t) + \ln h_t,$$

output per worker = sum of trend and stochastic productivity, capital to output ratio, and hours worked (in logs)

Growth accounting: 1960-2010



Does policy explain the slump?

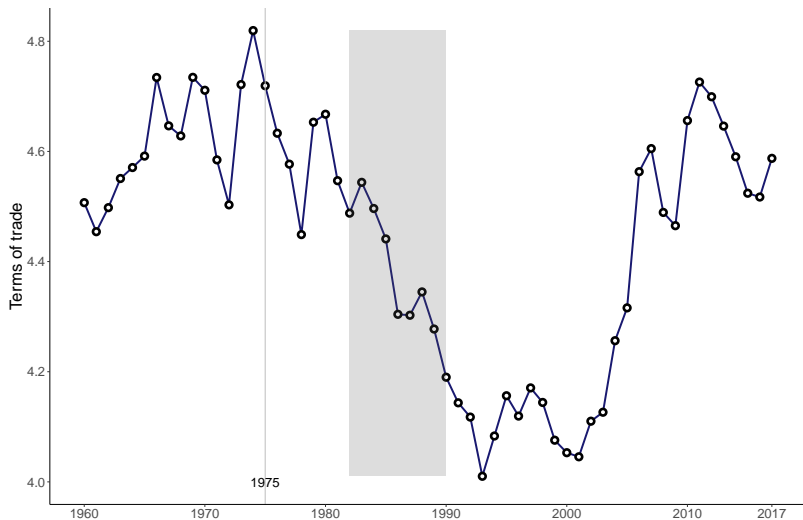
- radical reforms of the 1970s may have lead to massive misallocation:
 - ▶ crowding out of financing for private sector and misallocation induced by selective policies
 - ▶ inefficiency of state owned enterprises
 - ▶ cyclical deep cuts in public investment affecting quality of investment

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- high to hyperinflation contribution:
 - ▶ waste of real resources in dealing with extreme price and exchange rate variability
 - ▶ price dispersion

Do terms of trade explain the slump?

Terms of trade and growth



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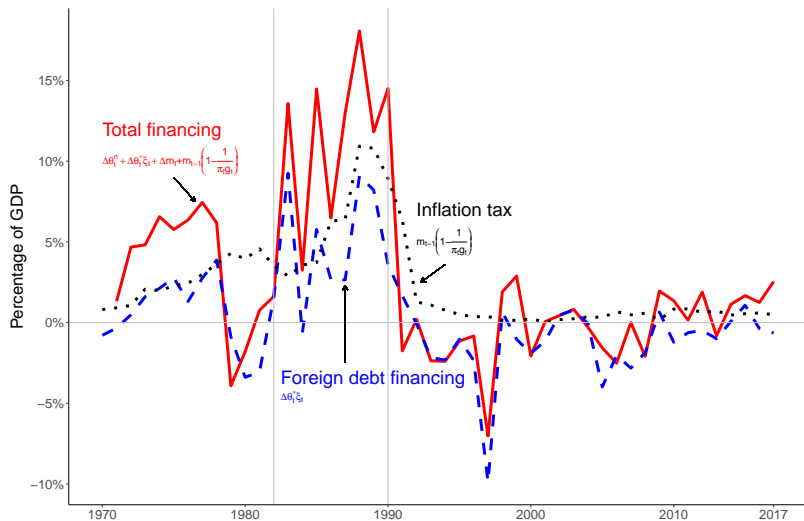
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Government financing

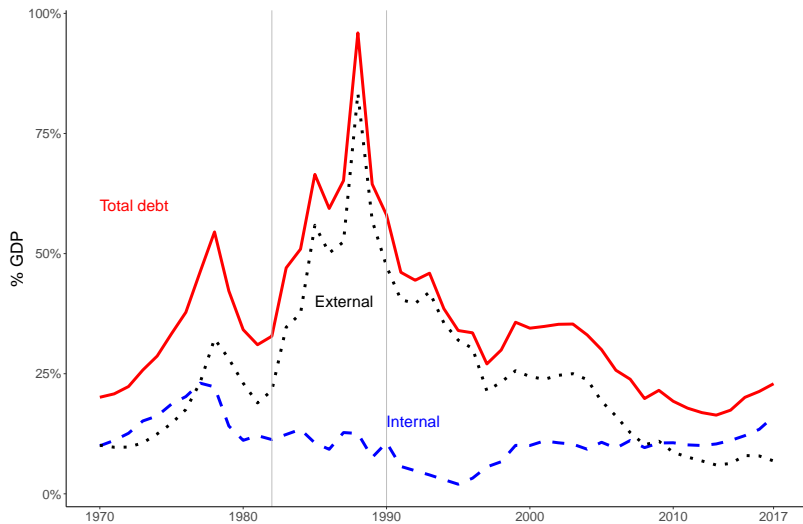
Budget constraint equation (Kehoe-Nicolini-Sargent)

$$\begin{aligned}\Delta\theta_t^n + \Delta\theta_t^*\xi_t + \Delta m_t + m_{t-1} \left(1 - \frac{1}{\pi_t g_t}\right) \\ = d_t + \theta_{t-1}^n \left(\frac{R_{t-1}}{\pi_t g_t} - 1\right) + \theta_{t-1}^* \xi_t \left(\frac{r_{t-1}^*}{\pi_t^w g_t} - 1\right)\end{aligned}$$

Government financing and selected components

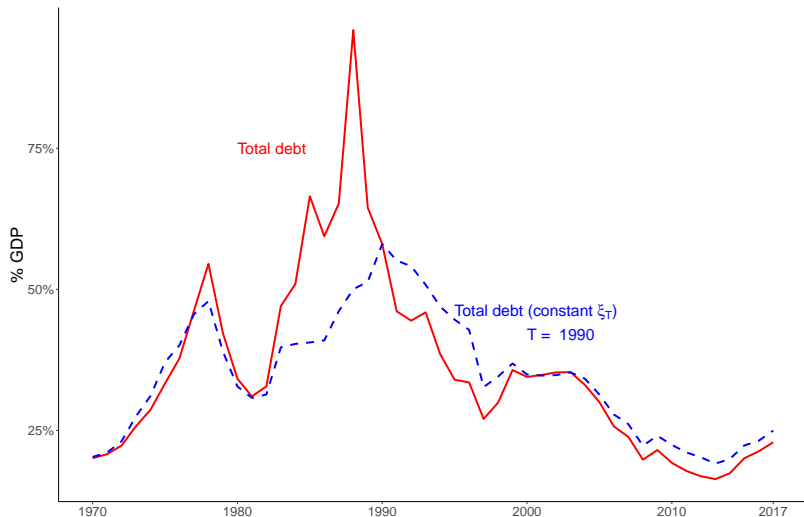


Public debt

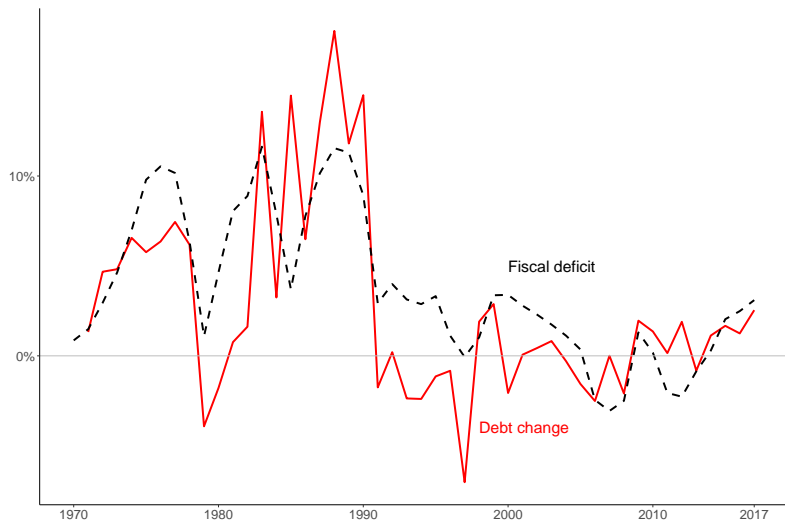


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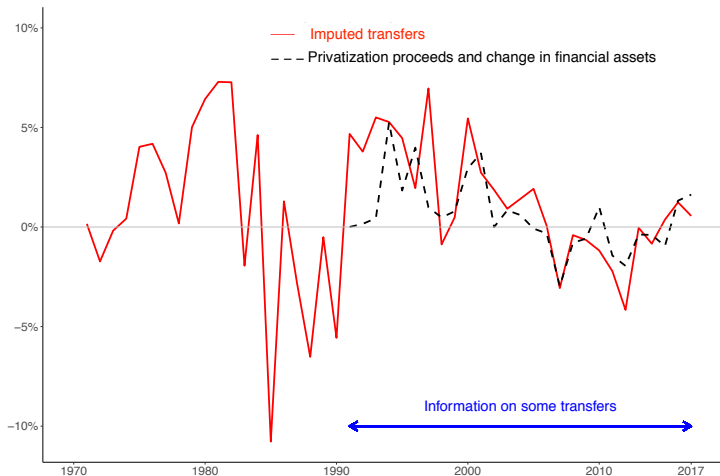
Constant real exchange rate



Fiscal deficit and government financing



Imputed transfers



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Belaunde administration

- except for brief episode in the 1940s, first democratic regime in Peru in decades
- increased spending on education and roads, among others
- modernization of fiscal institutions

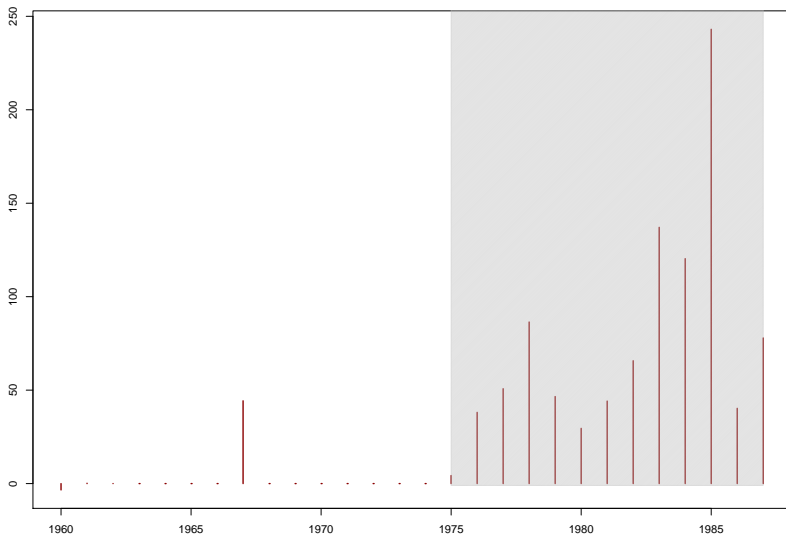
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- “war of attrition” between President and Congress leads to fiscal deterioration and inflationary finance
- balance of payment crisis and devaluation of 1967
- economic crisis, unfulfilled promises (land reform, IPC conflict) lead to military coup

Devaluations

Percentage increase in official exchange rate



The military regime

- el “gobierno revolucionario de la fuerza armada” (1968-1975)

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- increase in public spending in large investment projects (mining) and arm race
- inflationary finance and debt accumulation
- adverse terms of trade lead to balance-of-payments difficulties

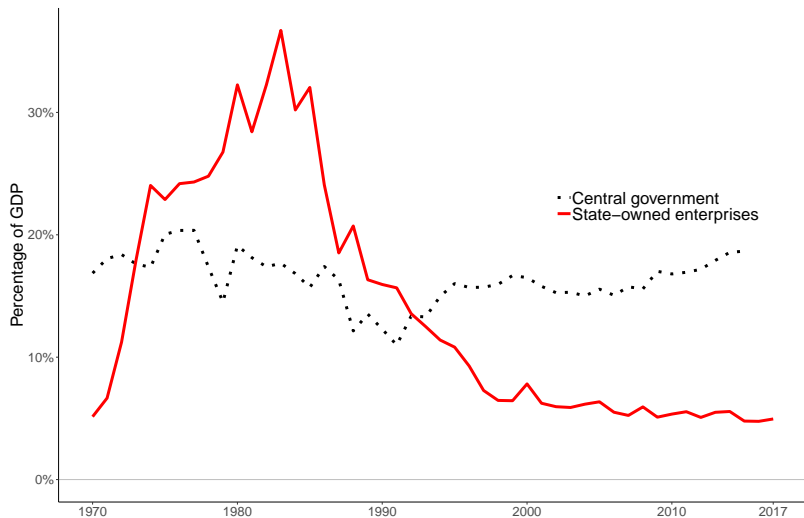
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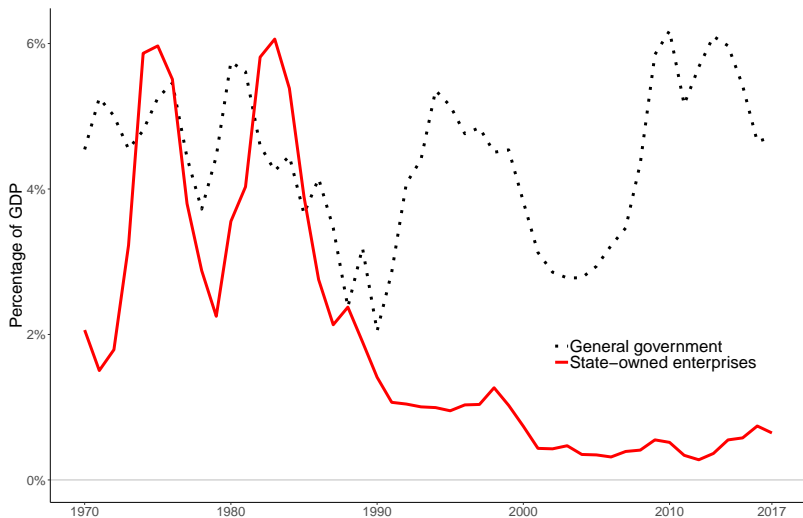
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- “la segunda fase” (1975-1980):
 - ▶ IMF supported stabilization plan: devaluation + cuts in public investment
 - ▶ unpopularity of regime leads to new elections

Expenditure of central government and state-owned enterprises

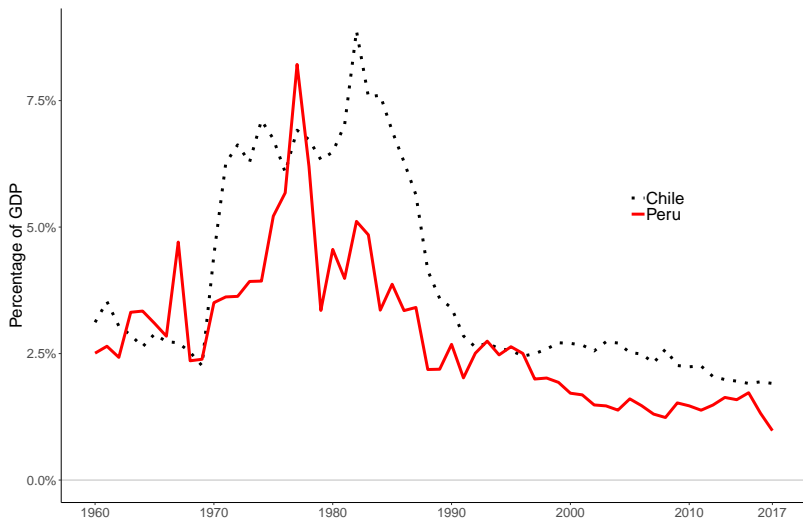


Capital expenditure of state-owned enterprises



Military spending

An arm race



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Return to democracy

- Belaunde's second term 1980-1985
- hit by adverse shocks:
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 - ▶ worsening interest rate on foreign debt
 - ▶ extraordinary negative weather shock (el Niño of 1982-1983)

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- Belaunde's second term 1980-1985
- hit by adverse shocks:
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 - ▶ extraordinary negative weather shock (el Niño of 1982-1983)
- policy responses:
 - ▶ cutting public investment
 - ▶ arrears in debt payments
 - ▶ inflationary finance

Heterodox Peru

The heterodox program of August 1985: “control and spend”

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- freezing of exchange rate
- freezing of public sector prices: gasoline, electricity, water, etc
- temporary freeze of all prices
- tax exemptions to selected sectors
- reduction of interest rate: zero interest rate for agricultural loans
- debt default (debt service capped at 10 % of exports)

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-
- Peru declared ineligible by the IMF
 - commercial loans to Peru classified as “value-impaired” in the US

Heterodox Peru

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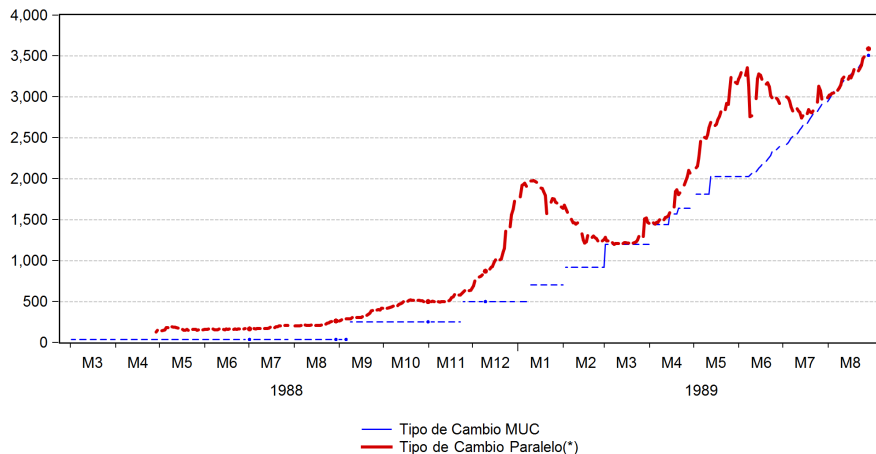
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- law of nationalization of the banking sector (July 1987)
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 - ▶ government backtracks after huge demonstrations (MVLL)
 - ▶ turning point

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- why persist in failed policies? gambling for success with model uncertainty?

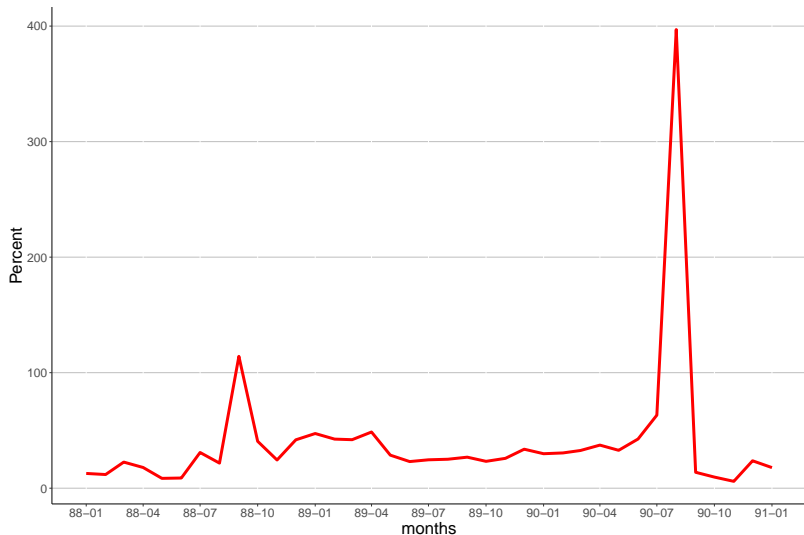
The unique exchange rate, and others

Sept 1988: 33 → 250 intis per USD



Monthly inflation and hyperinflation episodes

el Salinazo y el Fujishock





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Stabilization

- in 1990 a political outsider, Fujimori, was elected president
- two camps in new administration:
 - ▶ exchange-rate based versus monetary-based program
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- two camps in new administration:
 - ▶ exchange-rate based versus monetary-based program
 - ▶ total lack of credibility of state policies made exchange-rate based stabilization unviable
- key aspects of the August 1990 stabilization plan:
 - ▶ initial devaluation (166%) and then an exchange rate target (managed floating)
 - ▶ freeing regulated utility prices: gasoline (3040%), electricity (5270%), water (1318%), etc
 - ▶ monetary anchor
 - ▶ reduction of banking reserve requirements
 - ▶ fiscal austerity measures
 - ▶ trade liberalization
 - ▶ Creation of Budget Committee (coordination between Central Bank, Finance Ministry and Revenue Authority)

Stabilization and its aftermath

Two pillars of stabilization:

- 1 strong commitment to cut inflationary finance
 - ▶ after initial emergency loan, government committed not to ask for central bank financing
 - ▶ new Central Bank Law (1993) rules out government financing by the central bank

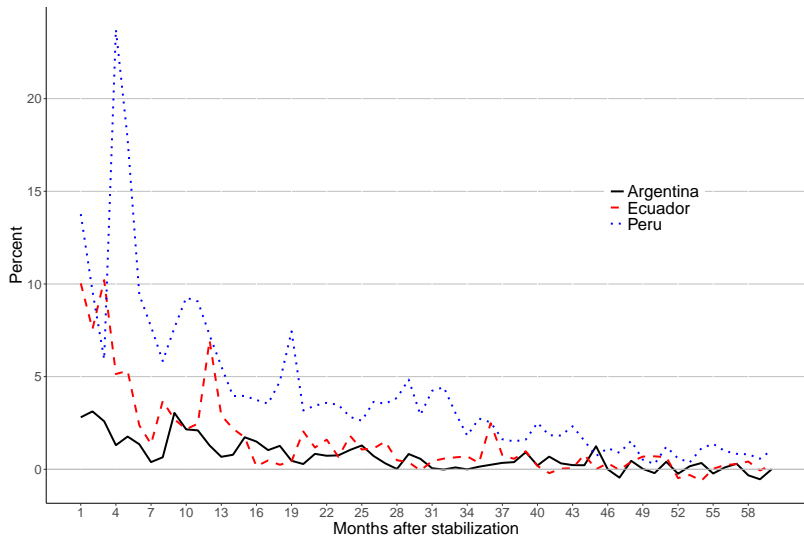
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Two pillars of stabilization:

- 1 strong commitment to cut inflationary finance
 - ▶ after initial emergency loan, government committed not to ask for central bank financing
 - ▶ new Central Bank Law (1993) rules out government financing by the central bank
- 2 market-friendly policies
 - ▶ eliminating multiple exchange rates, freeing exchange rate
 - ▶ reduction of tax and tariff dispersion
 - ▶ privatization of state-owned enterprises

Monthly inflation during stabilization

Argentina, Ecuador and Peru



Why did stabilization take so long?

- ① uncertainty about commitment of Fujimori government to end fiscal dominance
 - ▶ Fujimori campaigned against “orthodox shock” proposed by MVLL
 - ▶ conflicts with Congress → “self coup” of 1992 and new constitution of 1993
 - ▶ is authoritarian rule necessary for stabilization?

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- 4 vulnerability of stabilization due to persistence of dollarization
- 5 lack of instruments to conduct independent monetary policy
 - ▶ open market operations (Central bank certificates of deposits) took a few years

Why (and how) politicians led to different results after 1990?

- institutional changes: new law of central bank

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- fundamental mistrust in market allocations by economic and political actors in the run-up to hyperinflation
- compounded by wishful thinking or wrong model

Conclusions

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- two radical attempts to refashion the economy: 1968-1975 and 1985-1987
- fundamental mistrust in market allocations by economic and political actors in the run-up to hyperinflation
- compounded by wishful thinking or wrong model
- social learning after the trauma of great depression + hyperinflation + violence in the 1980s