Lebanon's 2019-2023 Currency Collapse

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Research Question:
LET'S HAVE A LOOK

What makes the 2019 Lebanese currency collapse uniquely vicious in terms of both causes and consequences, differentiating it from other instances of hyperinflation?

It's best that we understand Lebanese hyperinflation to be the product of **more** than just money printing. Lebanon's currency collapse occurred when a **delicate set of post-war arrangements** built on **corruption and mismanagement** shattered **due to geopolitical events and social unrest at the worst possible moment** - right before the **COVID-19 pandemic**. As the country tried to print money to cover its fiscal deficit, the **lockdowns caused GDP to plummet**, creating conditions we have found to be akin to **stagflation**.

Intro to Lebanon's Financial Crisis

Religious Sectors

~ Independence in 1943
~ Sunni Muslims
~ Maronite Christians
~ Shia Muslims

Civil War

~ 1975–1990
~Collapse of economy
~Militias and warlords controlled the country
~ Taif Agreement

Post-War

~ Extreme Borrowing
~ Syrian War
~ Whatsapp Tax

Currency Collapse

~ >200% inflation
~ LBP lost over 90% of its value
~ 80%+ of population in poverty
~ Exacerbated by currency controls and bank crisis

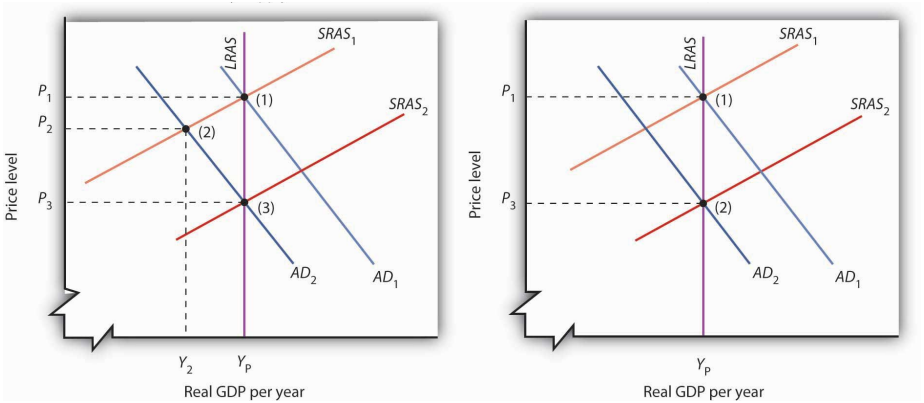
Classical Outlook:

Classical ideology:

- Long-run Focus
- Flexible prices and wages
- Money Neutral

Expectation

- Increase in money supply will lead to proportional increases in prices (vice versa)
  - Returning Real GDP back to its original levels
- Slight increase/decrease in inflation, but now outside the normal range



VS

Reality

- Heavy increase in money supply without proportional price increase
  - Hyperinflation and dollar depreciation
- Increase in price with decreases in consumption (contradicts classical view)
- Difficult to analyze Lebanon in the classical view

Keynesian Outlook:

Keynesian ideology:

- Short-run Focus
- Sticky prices
- Aggregate Demand output

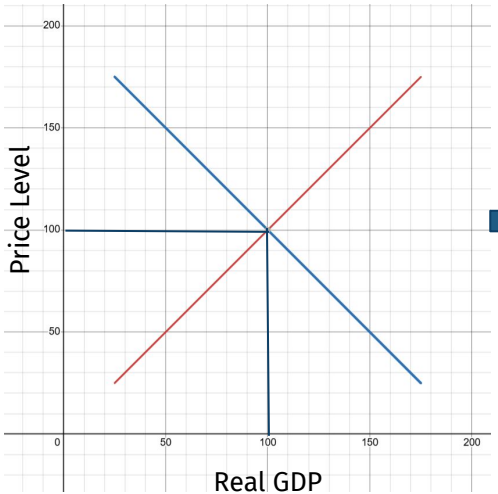
$$Y = C + I + G+NX$$

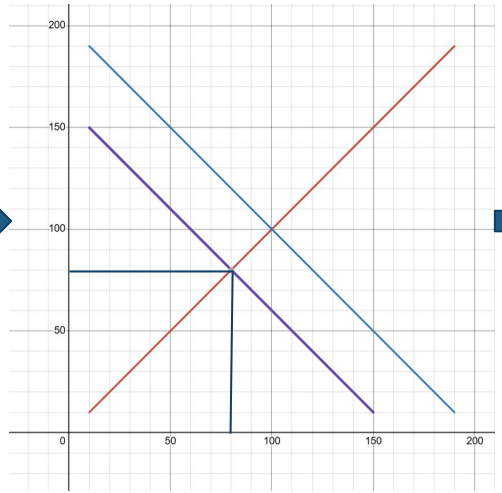
Decrease in Aggregate Demand

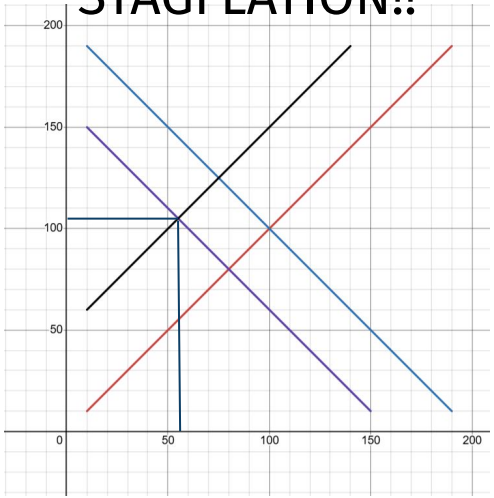
Decrease in Aggregate Supply:

- Workers emigrating, protest, less productivity

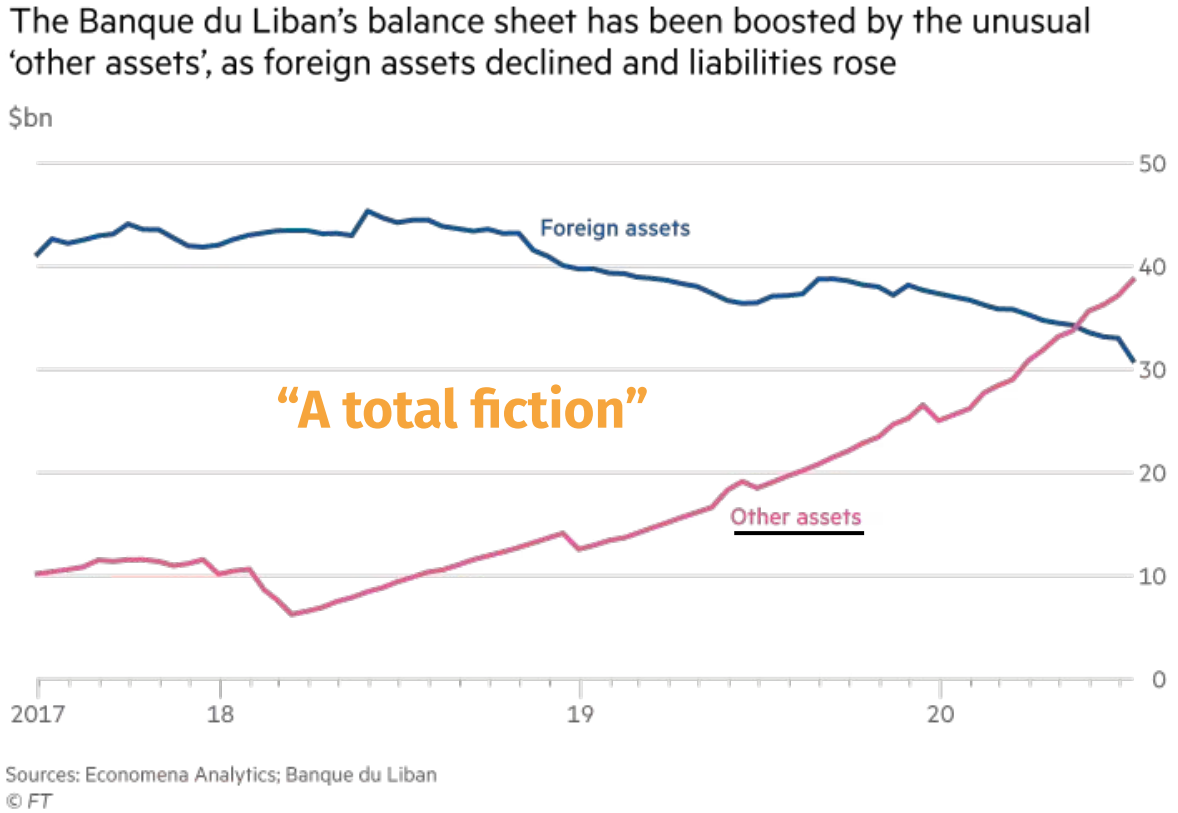
CHARACTERISTICS OF STAGFLATION!!







Seigniorage: An Asset?

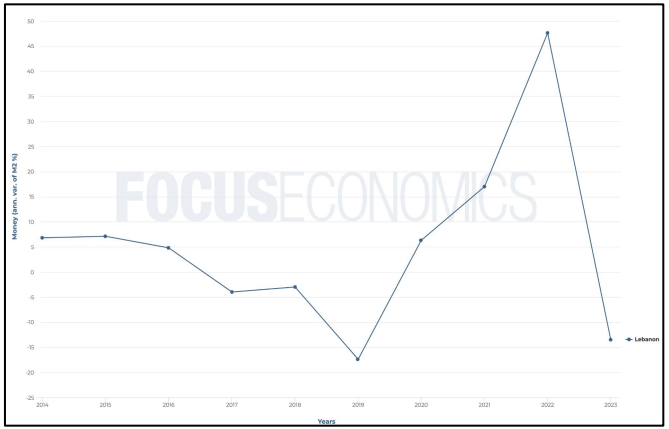


Banque du Liban (BdL) recorded income from seigniorage as an **asset** to buoy the appearance of an increasingly **debt-ridden** central bank..

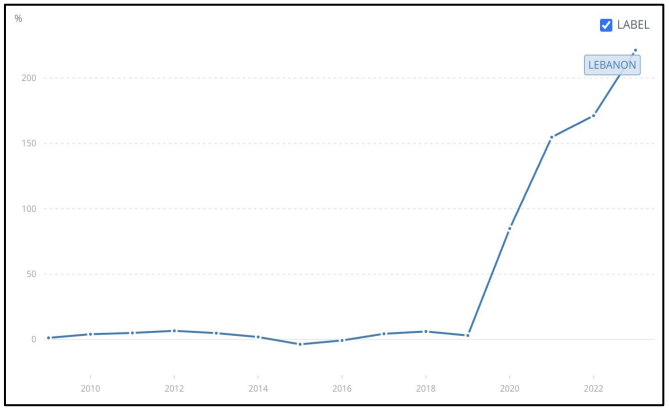
- "Other assets"
- **$18 Billion**
  - **24%** of total assets
- **"Seigniorage on financial stability"**
  - **$6 Billion**

The Quantity Theory of Money in Relation to Lebanon

Money Supply Growth



Inflation Rate



Key Equation:

$$MV = PY$$

- M = Money Supply
- V = Velocity of Money
- P = Price Level
- Y = Real GDP (Output)

As Lebanon's government printed excessive amounts of money to finance debt it lead to:

↑M (Money Supply) without ↑Y (GDP Growth) → ↑P (Prices)

But what happened to V (Velocity)? How did the country try to resolve this hyperinflation?

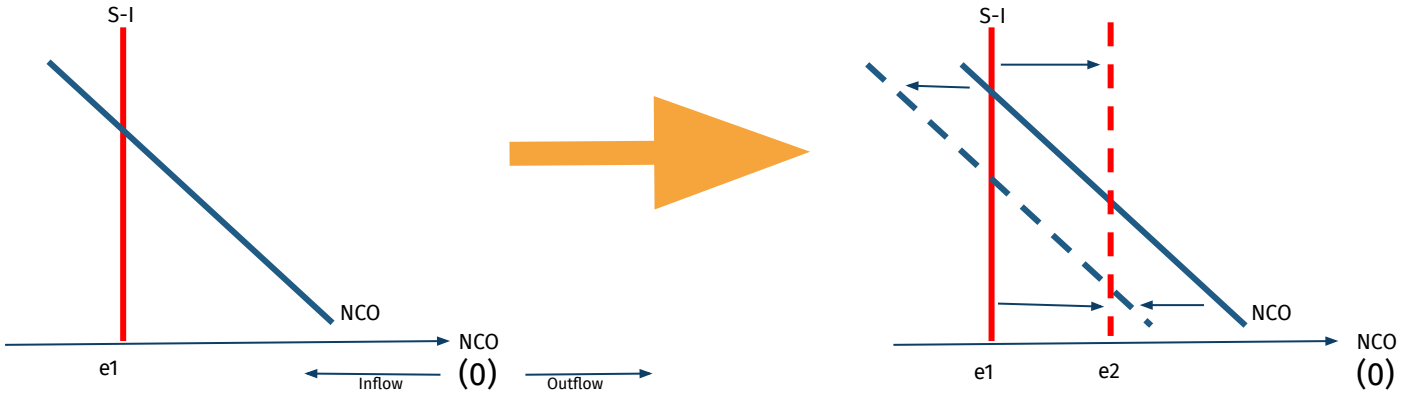
Balance of Payments & Net Capital Outflow

Pre-crisis:

- Savings deeply negative, investment ~20% GDP
- NCO = S − I → Very negative (massive capital inflow)
- Current account: large deficit driven by net imports
- Financial account: covered by foreign deposits, remittances, aid

Post-crisis:

- Investment collapses, savings still negative
- Capital flight, but NCO stays negative (saving too low)
- Errors & omissions surge → unrecorded flows balance books
- IMF aid, diaspora remittances, and informal inflows = lifeline



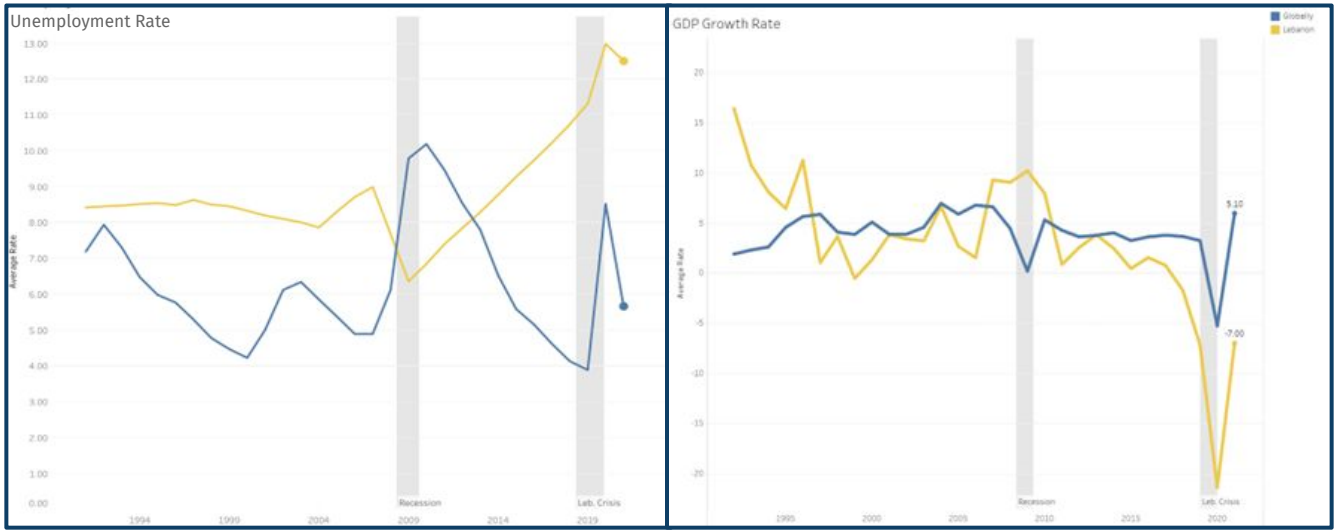
NCO curve shifts left**: as in willingness to invest in lebanon decreases**, but the massive drop in investment outweighs this, leading to ultimately a higher less negative NCO (or in other words, less financial inflow) post crisis

Okun's Law Application:

$$\frac{\bar{Y} - Y}{\bar{Y}} = 2(u - \bar{u})$$

- Relationship between the GDP and cyclical unemployment
- Less income → Decrease Demand → Layoffs → Decrease GDP

Unemployment rates: 11%-12%



GDP Growth Rate: Roughly -20%--23%

Lebanon's Economy and its IS-LM Model

IS Curve:

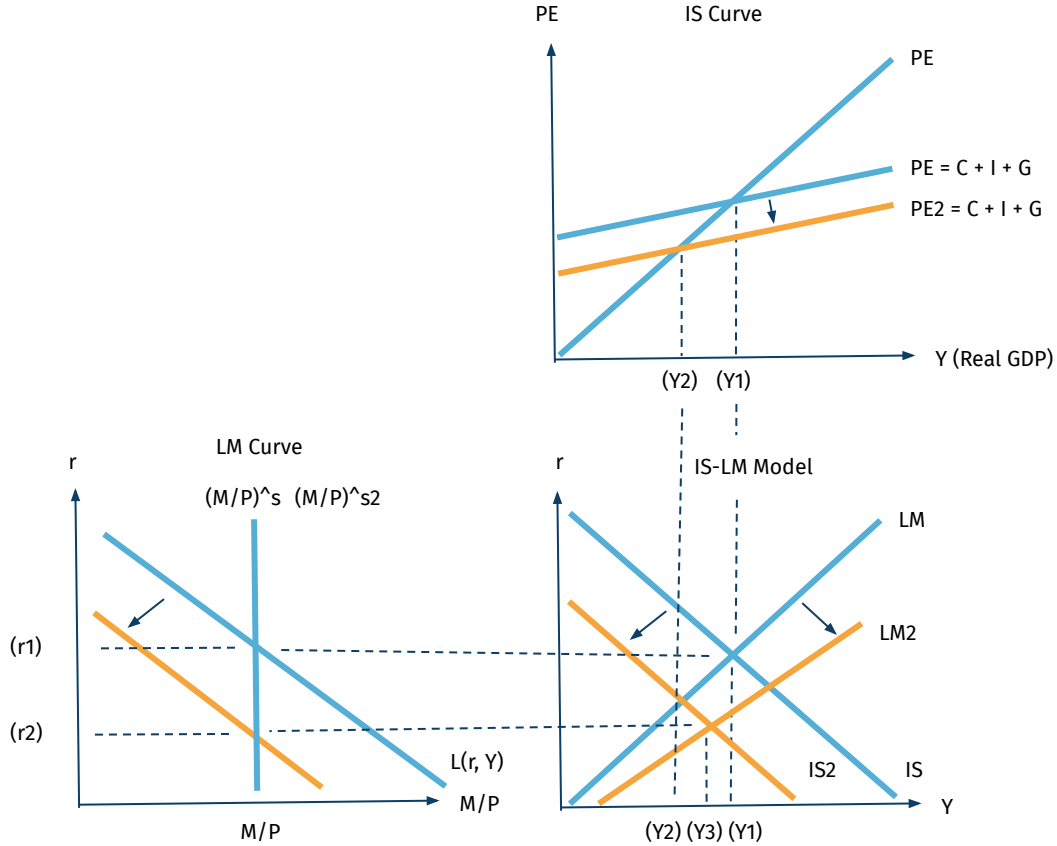
- Investment-Saving collapse as (↓C) and (↓I)
- Shift LEFT → Lower Output (Y↓)

LM Curve:

- Money is printed (↑Ms) but velocity collapsed (↓V)
- Flattened RIGHT shift as inflation overpowers rate effects

Equilibrium:

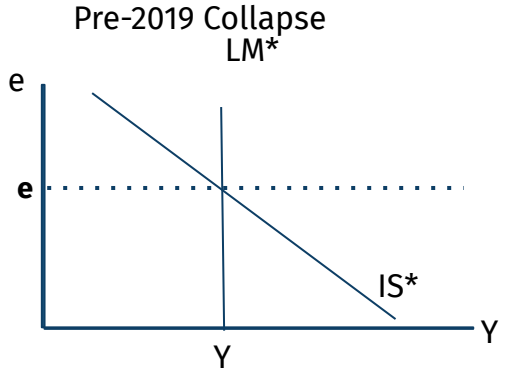
- Thus characteristics of stagflation occurs as (↓Y) and (↑P)
- Interest rate (r2) is ambiguous as its pulled down by liquidity, but pushed up by inflation and risk premiums.

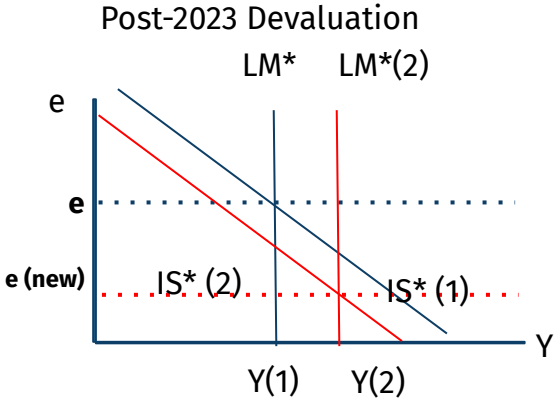


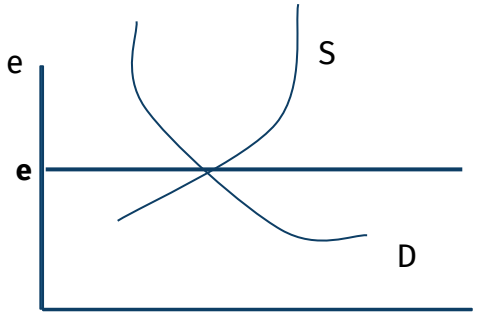
Lebanon, Mundell-Fleming, and The Impossible Trinity

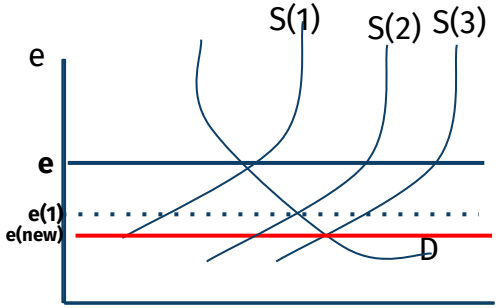
Mundell-Fleming says **monetary policy** has **no** effect on output in a fixed economy.

Moreover, we know that since Lebanon, prior to collapse, had **both** a **fixed exchange rate** and **free capital flows**, there could be no manipulating interest rates.









$$Y = C(Y-T) + I(\mathbf{r^* + \theta}) + G + NX$$

$$M/P = L(\mathbf{r^* + \theta}, Y)$$

Aggregate Demand and Aggregate Supply

Pre-Collapse (Short Run – 2018)

AD stable: Confidence, consumption, and investment held up; government spending high despite deficits
SRAS stable: Pegged exchange rate kept import costs low; firms had access to cheap inputs
Equilibrium: Output steady, prices manageable, but propped up by unsustainable borrowing

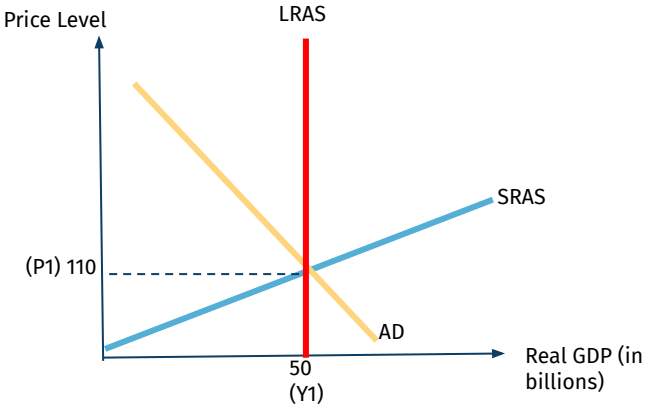
Post-Collapse (Short Run – 2019–2021)

AD collapsed: Consumption and investment fell sharply; government spending constrained; printing money drove inflation
SRAS collapsed: No more inflow of foreign dollars, peg broke, import costs soared, firms couldn't afford inputs; infrastructure breakdowns worsened supply
Outcome: Real GDP fell, prices surged → **stagflation** (low output, high inflation)

Long-Run Effects (Post-2021)

LRAD shifted left: Ongoing low consumption and investment; confidence and capital still absent
LRAS shifted left: Capital deteriorated, skilled labor emigrated, institutions weakened
Outcome: Long-run equilibrium now at **lower GDP** and **higher price level**

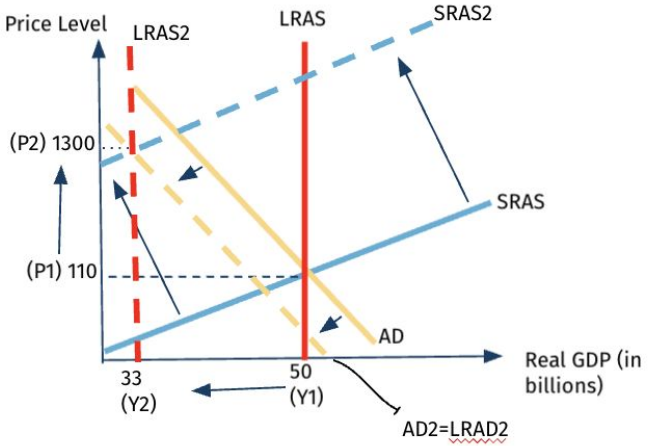
Note: values on graphs reflect actual estimates equated to USD



Currency Collapse

Prices increase 13x, Output falls

(Changes not visualized to scale)



Comparing Lebanon's crisis to historical hyperinflation



Past Hyperinflation occurrences:

- Zimbabwe
- Weimar Republic

Weimar Republic:

- Germany owed lots of money following WW1
- Lost territory and opportunity for income
- Government just PRINTED!!!

Zimbabwe:

- Land Reform/Decrease in agriculture
- Decrease in currency value, so Government just PRINTED!!!

Implications:

- Lebanon currency crash was more than just printing money
- Classic monetary collapse vs. Complex financial system collapse
  - Classical Monetary: More straightforward approach (More money leads to less value)
  - Complex Financial System: More complex involving fixed exchange rate, political corruption etc.

2019 — **Protests**

Nationwide protests erupt over corruption and proposed taxes, freezing government functions.

2020 — **Lockdown**

Country defaults on its sovereign debt and locks down due to COVID-19.

2021 — **Hyperinflation**

As a result of the banking system collapse and paralyzation of the labor sector, hyperinflation peaks.

Recent Years — **Poverty**

Prices continue to increase and mass exodus occurs as triple digit inflation and disappearing government subsidies push 80% of Lebanese under the poverty line.

Conclusions

Key Drivers	Short-Term Solutions	Long-Term Solutions
• Excessive Money Printing • Frozen Deposits • Illegal Economic Activity • Political Corruption	• Currency Board • Emergency Liquidity • Deposit Recovery • Amnesty Program	• Independent Banking • Digital Payment Push • Forensic Audits • Constitutional Overhaul

Lebanon's crisis wasn't a typical case of hyperinflation. The coordinated depletion of public trust and resources dismantled the banking sector, nullified monetary policy, and condemned the economy to a protracted and uncertain recovery, one it is still struggling to navigate.

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