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# Intro to Sovereign Debt and Restructuring

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# Brain Teaser

How many trailing zeros are in 100 factorial

$$100! = 100 * 99 * 98 * \ldots * 2 * 1$$

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# Solution: Brain Teaser

**Answer: 24**

A trailing zero is created when a multiple of 5 is multiplied by a multiple of 2 (15 * 8 = 120)

There are 20 5's between 5 and 100

25, 50, 75, and 100 contain 2 5's, so we have 4 additional ones

There are more 2's than 5's, so the answer is the number of 5's which is 20 + 4 = 24

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# Distinguishing FX & Local Debt

- Refers to debt denominated in a foreign currency ("FX"), usually dollars
- FX borrowing is generally ***cheaper*** by reducing currency risk to investors
- FX debt also helps sovereigns pay for imports or mitigate CA imbalances

- However, when ***borrowing*** in FX, sovereigns have to ***pay*** in FX

  - **Method I: Exports** – sell goods to the rest of the world in dollars

  - **Method II: Use FX Reserves –** central banks can accumulate reserves of other currencies to meet debt payments

  - **Method III: Bailout –** Approach the IMF for a bailout package

# Bankrupt Sovereigns

- A bankrupt sovereign is one that has ***run out of FX*** to meet obligations
- This may be the result of a ***liquidity*** or a ***solvency*** crisis
- There are several reasons for why this may occur

  - **Cause I –** Balance of Payments Crisis: A country imports more than it exports, running down its FX reserves to pay for imports

  - **Cause II** – Banking Crisis: If savers save in FX, rather than local currency, a run on the banks can cripple FX reserves

  - **Cause III** – Currency Crisis: If a country pegs its currency, it intervene with FX to support the peg (keeps P constant, vary Q)

# Financial Variables

**Ex:** A bond at $100 maturing in 5 years pays a 5% interest rate

- **Principal Haircut** – reduces the face value of the obligation
  ***Ex:*** I owe you ***$80*** instead of $100 now

- **Coupon Haircut** – reduces the interest rate on the obligation
  ***Ex:*** I pay you ***3%*** interest instead of 5% interest

- **Maturity Extension –** extends the payment term of the obligation
  ***Ex:*** I owe you this money in ***10 years*** instead of 5 years

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# Legal Variables

- There are several legal terms to consider during a sovereign restructuring
  - **Collective Action Clause** – Specifies voting thresholds for a deal to be approved, preventing investors from ***"holding out"***
  - **Jurisdiction –** Covers which legal jurisdiction governs the bonds (typically New York/London or ***"local"***)
  - **Exit Consents** - Legal provisions that strip bondholders who refuse to accept an offer of legal protections, incentivizing cooperation

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# Case Studies

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# Restructuring Precedents

| Country | Debt Exchanged | Pre-emptive/Post-Default | Cut in Face Value | Face Value Cut | Recovery Rate | Exit Yield |
|---|---|---|---|---|---|---|
| Pakistan | $610 | Pre-emptive | No | n/a | 86% | 19.4% |
| Ukraine | 1,598 | Pre-emptive | Yes | 1% | 83% | 22.8% |
| Ecuador | 6,700 | Post-Default | Yes | 34% | 40% | 17.3% |
| **Russia** | **31,943** | **Post-Default** | **Yes** | **36%** | **38%** | **14.0%** |
| Uruguay | 3,127 | Pre-emptive | No | n/a | 91% | 11.5% |
| **Argentina** | **60,572** | **Post-Default** | **Yes** | **29%** | **21%** | **9.2%** |
| Dominican Republic | 1,100 | Pre-emptive | No | n/a | 96% | 9.0% |
| Iraq | 17,710 | Post-Default | Yes | 82% | 11% | 9.0% |
| Belize | 516 | Pre-emptive | No | n/a | 71% | 9.0% |
| Ecuador | 3,190 | Post-Default | Yes | 69% | 31% | 13.0% |
| Ivory Coast | 2,940 | Post-Default | Yes | 20% | 48% | 10.0% |
| **Greece** | **271,220** | **Pre-emptive** | **Yes** | **54%** | **23%** | **18.1%** |
| Belize | 550 | Pre-emptive | Yes | 10% | 76% | 8.0% |
| Ukraine | 18,000 | Post-Default | Yes | 20% | 80% | 9.0% |
| Barbados | 7,361 | Post-Default | Yes | 26% | 70% | 7.0% |
| Ecuador | 17,375 | Post-Default | Yes | 9% | 63% | 9.5% |
| **Argentina** | **67,417** | **Post-Default** | **Yes** | **1%** | **49%** | **11.2%** |

# Russia - 1998

# Russia: Causes of Distress

- 1993 and 1994 marked two major events for Russian macro:
  - 1993 – Russia adopted the zero option formula, assuming the USSR's debts
  - 1994 – Russia pegged the ruble to the dollar to stabilize inflation

- The Russian economy recovered from 1994 to 1997:
  - Inflation fell from ***197%*** in 1995 to ***14%*** in 1997
  - The fiscal deficit also fell from ***>11% of GDP*** in 1994 to ***<5%*** in 1995
  - Rising oil and metals prices also supported the growth of exports

- However, the Russian recovery masked underlying structural issues
  - Fiscal revenues would be hit by arbitrary and inefficient tax collection
  - In 1997-98, the ruble's peg would face significant market pressures
  - Consistent IMF support was hampered by political instability

# Eurobonds vs. GKOs

- GKOs were liquid, short-term RUB-denominated T-Bills
  - Used by the Central Bank of Russia for open market operations
  - First opened to foreign participation in 1996, liberalized in 1997
  - Non-resident share grew rapidly, reaching 30% by Dec 1997
- Russia regained access to the Eurobond market in 1996
  - The stock of Eurobonds would peak at $16b by August 1998
  - The stock of non-resident GKOs would peak at $17b
- Govt attempted to swap GKO liabilities for Eurobonds
  - Russia began to have difficulties rolling over short-term GKOs
  - Interest rates also rose as Russia sought to defend the ruble peg
  - As such, GKO yields had also risen to dramatic levels (>50%)

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# Parsing the Default

- In 1998, authorities offered to swap all GKOs through July 1999
  - These would be swapped for new 7-year and 20-year Eurobonds
  - The transaction was designed to extend maturities & smooth GKO markets
  - A single clearing spread of ***940 bps*** over comparable Treasuries was set
  - Only about ***$4b*** of the eligible ***$40b*** to be swapped were tendered
- Less than a month after the swap failed, Russia defaulted on its GKOs
  - CBR signaled it would unilaterally restructure all GKOs through end-1999
  - A 3-month moratorium on external private debt was also triggered
- The final GKO restructuring package was deeply complex:
  - Holders got a package of quasi-cash, medium-, and long-term bonds
  - All proceeds received by non-residents were placed into special S-accounts
  - These accounts were not freely convertible into foreign exchange or rubles

# Implications for Today

- 1998 demonstrated Russia's sensitivity to local vs. non-resident holders
  - Inflating away local currency debt would carry significant costs
  - Non-residents themselves also played a key role in the GKO market itself
  - This was a key consideration in the ultimate restructuring outcome
- Today, Russian sovereign debt is in the headlines, because of sanctions
  - The Treasury has sanctioned a significant share of Russia's FX reserves
  - US holders are permitted to receive interest payments until May 25
  - Last night, the Treasury halted payments out of frozen US accounts
- Russia offered a unique ruble-denominated buyback to local holders
  - The offer covered a Russian Eurobond maturing yesterday (April 4)
  - Local vs. non-resident considerations remain at the center of this move
  - This was aimed at ensuring locals could receive payments despite sanctions

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# Greece - 2012

# Greece: Causes of Distress

- Fiscal Imbalances were wide throughout the 2000s:
  - Greece had, for some time, run substantial fiscal deficits
  - A higher revised deficit in 2009 caused initial instability in credit markets

- Entry into the Eurozone:
  - The establishment of the euro removed Greece's monetary sovereignty
  - Euro area members do not pursue individual monetary policies
  - As such, there was no scope for using monetary stimulus nationally

- Effects of the 2008 Financial Crisis:
  - Greece entered with limited fiscal space and no monetary policy
  - Greek unemployment rose to levels above the Great Depression

- As a result, Greece had a de-facto, classic "FX debt" crisis:
  - Greece had no control of the currency debt was issued in (euros)
  - Greece had limited, if any, "reserves" that it could use to back debts

# Crisis/RX Timeline

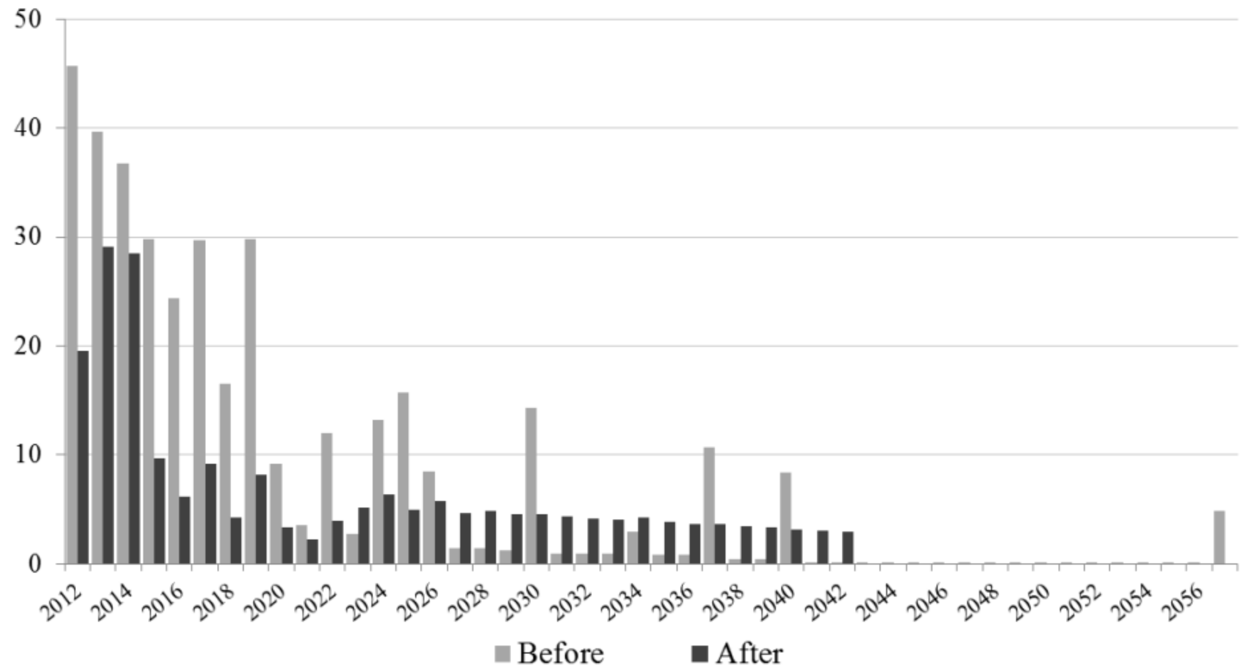
- **Oct 2009:** Greece revises its deficit higher from 7% to 12% of GDP
  - Greek credit spreads rise from 300 bps to ***>900 bps***
  - Effectively, Greece loses market access and cannot roll over debts
- **May 2010:** Greece receives its first three-year bailout package
  - Moody's downgrades Greece in mid-June
  - Credit spreads are back ***>800 bps*** by July
- **Oct 2010:** Eurozone accepts possibility of a sovereign default
- **June 2011:** First offer – creditors & EU propose a first offer
  - Propose four bond offerings with varying terms
  - However, proposal only covers bonds maturing in <9y
- **Oct 2011:** Second offer – EU leaders offer steeper terms to creditors
  - One package offered to all bondholders
- **Feb 2012:** Creditor committee accepts the EU offer

# Key Features of Greece

- **Domestic Political Volatility:**
  - Far-left SYRIZA won elections in 2015
  - Elections preceded in a major standoff with the IMF
  - Greece finally exited its last IMF program in 2018
- **Tensions between the EU and the IMF:**
  - IMF continuously pushed for more debt reduction by the EU
  - EU stakeholders, particularly Germany, resisted these moves
- **Harsh Treatment of Creditors/Bondholders:**
  - Only Iraq, Argentina, and Serbia achieved greater debt relief
- **Retrofitted Collective Action Clauses:**
  - A very neat feature, but are unlikely to be replicated in the future
  - These were largely a function of the Greek domestic law system
  - Power of holdout creditors has greatly increased since this

# New Debt Schedule

**Figure 2. Impact of Exchange on Greece's Debt Service to Private Creditors**




*Note*: Coupon plus principal repayments, at face value, in € billion. *Sources*: Hellenic Republic (Ministry of Finance and Public Debt Management Agency), Bloomberg, and authors' calculations.

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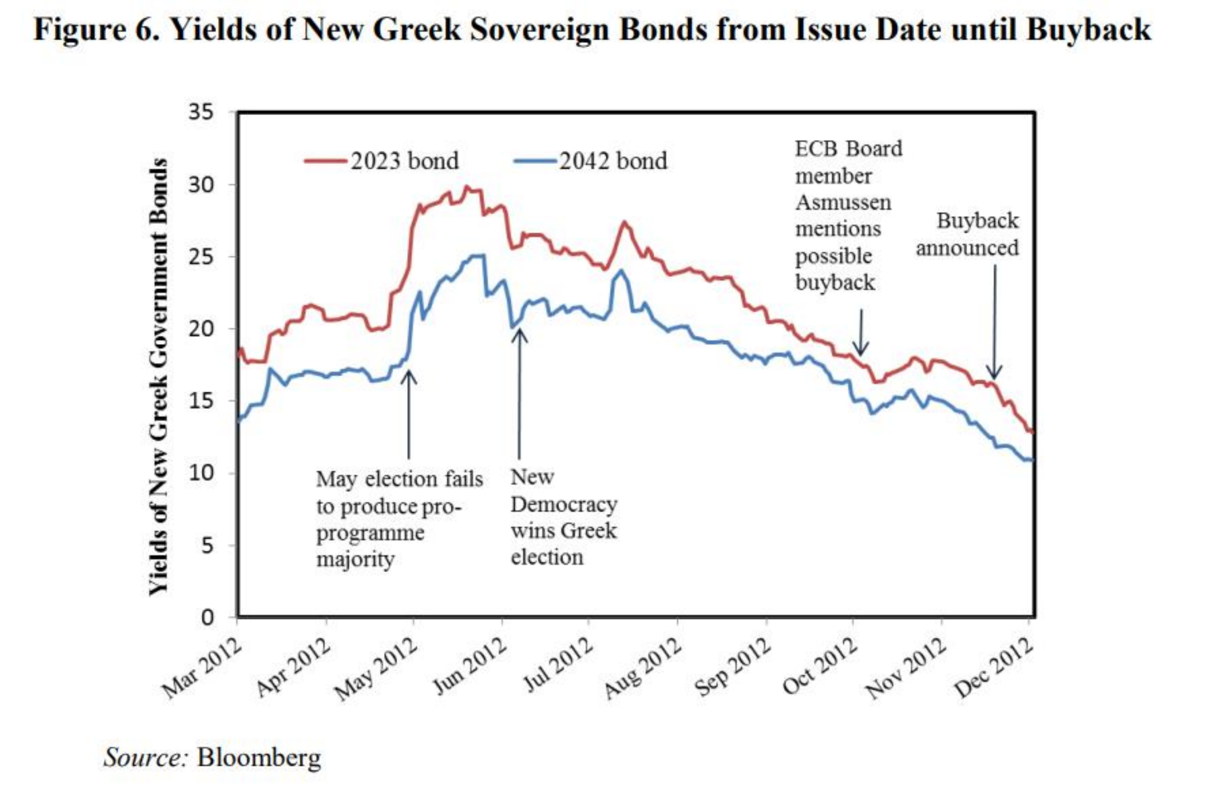
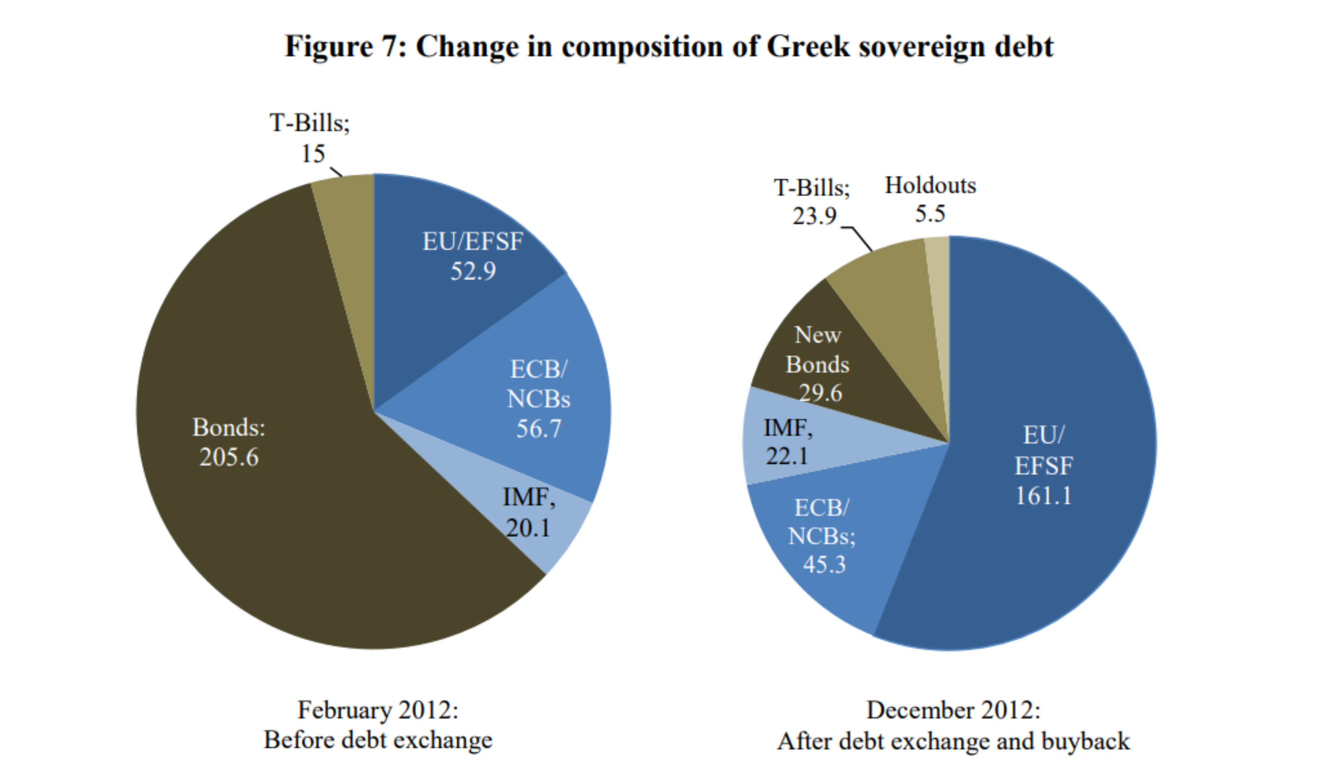
# Trading Behavior



# Shifting Capital Structure



# Argentina

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# Sowing the Seeds of Crisis

- Menem introduced a convertibility plan: ***1 ARS = 1 USD***
  - The peg was designed to contain inflation and force discipline
  - To be maintained, Argentina had to maintain FX reserves
  - Initially, this worked, but gave way to higher borrowing
- Menem's convertibility plan created a similar straitjacket:
  - High debt levels prevented the government from fiscal stimulus
  - The peg to the dollar prevented monetary policy
  - Cutting spending would only deepen the hit of the recession
- Argentina defaulted in 2001 on its debt, owing:
  - $81.8b to private creditors
  - $9.3b to Paris Club creditors (i.e., Western governments)
  - $9.5b to the International Monetary Fund

# Kirchner Era – 2005, 2010

- Argentina issued a unilateral offer in 2005:
  - Of the $81.8b, $62.3b was exchanged into $35.2b
  - This represented a low recovery rate of 27-30% on an NPV basis
  - Argentina passed the Lock Law to ban revising these terms
  - The exchange had a ***very high*** non-participation rate (24%)

- Economic recovery was unusually strong:
  - FX reserves grew from $10.2b in 2002 to $52.2b in 2010
  - Economy grew at an average rate of 8.5% from 2003-08

- Argentina subsequently issued a new offer in 2010:
  - $12.4b of the eligible $18.4b of bonds were exchanged (67.7%)
  - After the offer, 91.3% of total defaulted debt was exchanged

# Holdout Creditors - Elliott

- Holdouts challenged Argentina under ***pari passu***
  - ***Pari passu*** holds that equal creditors must be treated equally
  - Since the offer, Argentina remained current on exchanged debt
  - By ***not paying*** holdouts, they argued they were subordinated

- Argentina entered ***technical default*** in 2014 after a legal ruling:
  - Judge Griesa upheld the legal reasoning of the holdout creditors
  - Griesa went one step further in blocking such payments

- Reformist candidate, Mauricio Macri, won 2015 elections
  - Macri agreed to finally return to negotiations with holdouts
  - Macri paid $4.65b, equivalent to ***75%*** of the $5.9b left
  - This recovery rate was ***significantly higher*** than prior offers

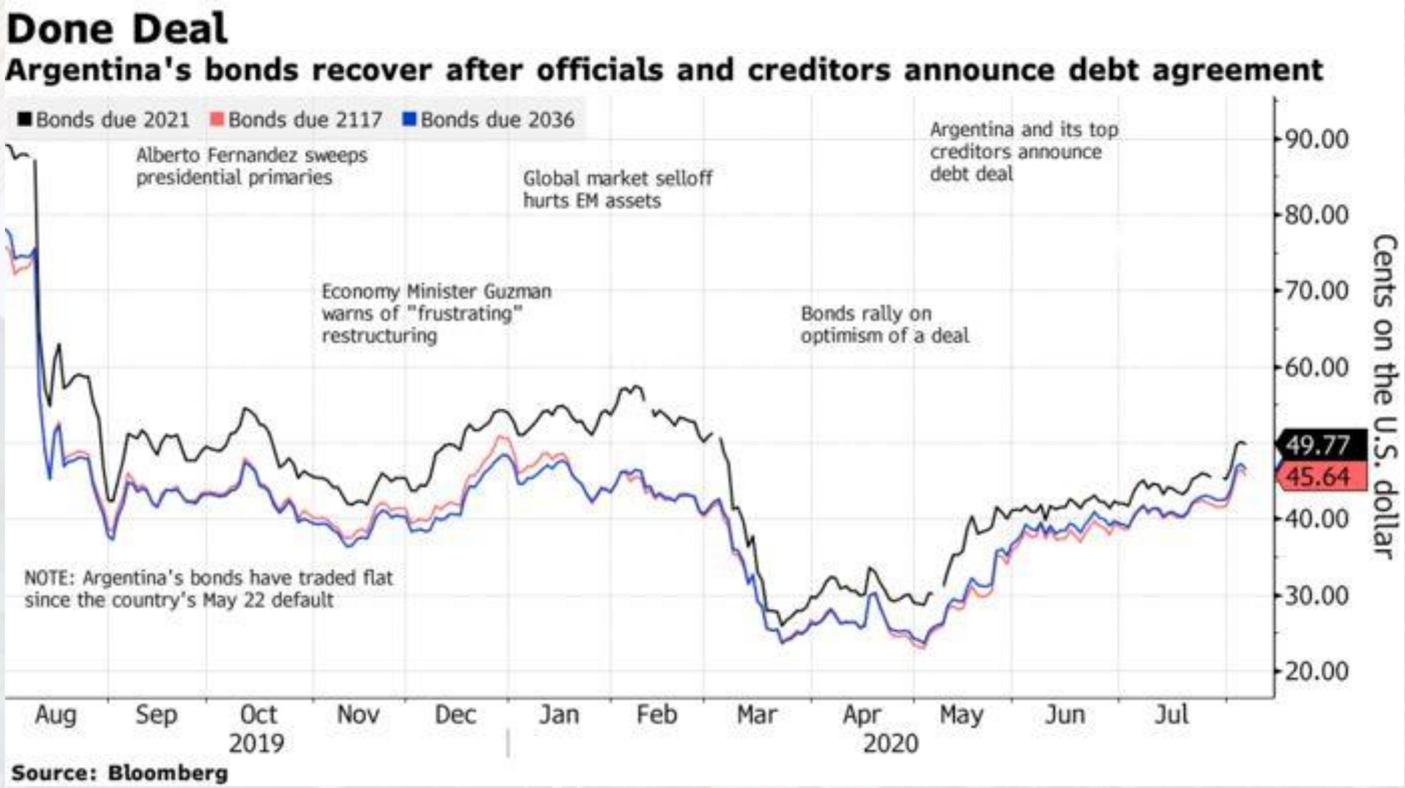
# Unraveling of Macri

- Macri lacked a majority in Congress, preventing reforms
  - Macri tapped markets for ***$56b in external debt*** from 2016-18
  - Macri soon faced a balance of payments crisis in 2018
  - The IMF provided Argentina with its ***largest-ever*** program ($57b)

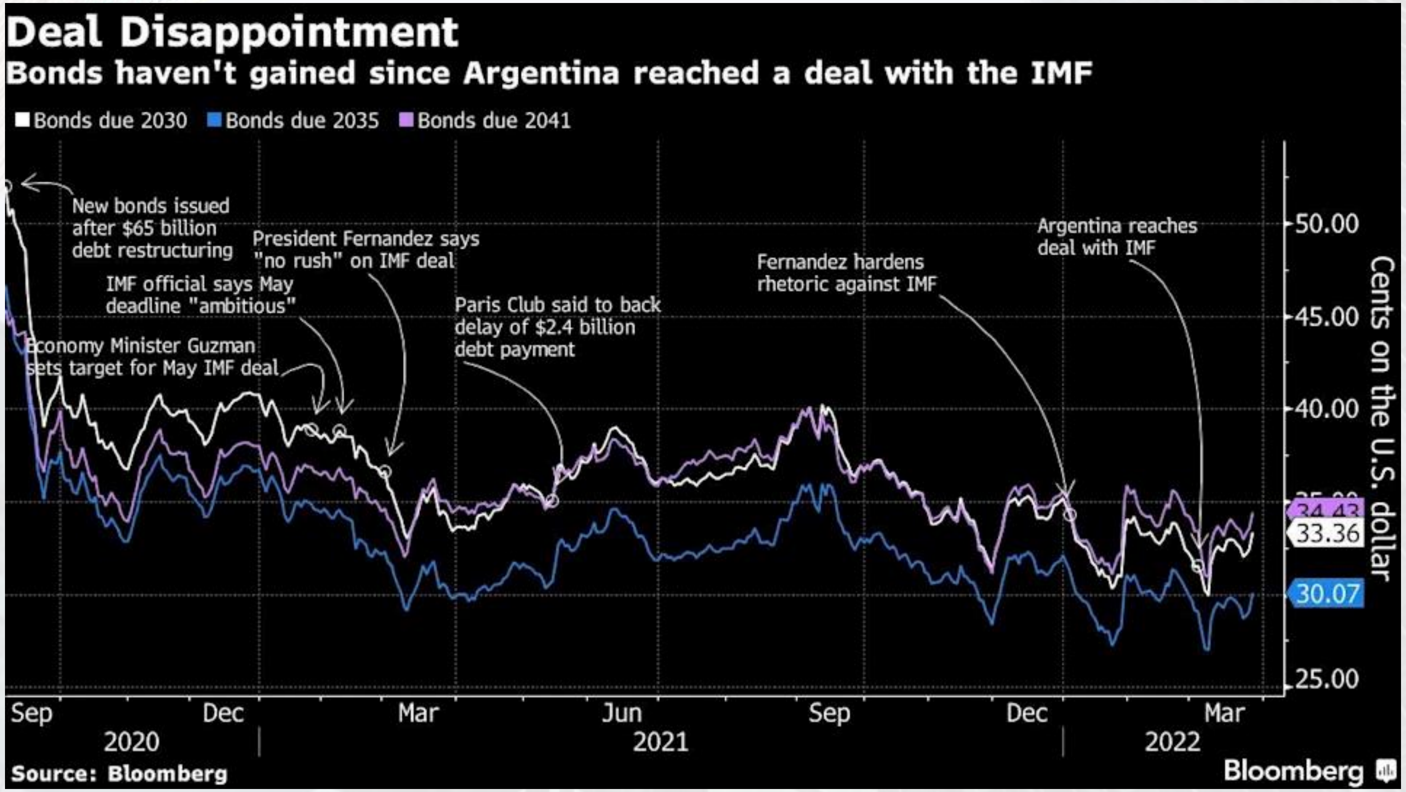
- Leftist Alberto Fernandez won elections, seeking to restructure debts:
  - Fernandez sought to treat creditors better than Kirchner did
  - Bondholders ended up tendering 93.55% of eligible bonds
  - Premised on the govt ***addressing the IMF debts*** after

- Fernandez's government reached an IMF deal ***last month***
  - The Argentine govt delayed negotiations until after midterm elections
  - The govt ***narrowly*** avoided an IMF default after running out of reserves

# Pre-RX Trajectory



# Post-RX Trajectory



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# Get in Touch

Feel free to reach out to us over Facebook or email if you have any questions

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