PP440E Macro Case Study
The Many Varieties of Emerging Market Recessions: The Case of Argentina[1]

Background reading

- Silent Revolution: The IMF 1979-1989, October 1, 2001, Chapter 8 - The Crisis Erupts: https://www.imf.org/external/pubs/ft/history/2001/ch08.pdf

- Avoiding new default - https://www.brookings.edu/blog/up-front/2020/04/03/how-to-avoid-a-new-argentina-default/

- Argentina in default -2014 - https://www.brookings.edu/blog/up-front/2014/08/05/argentina-in-default-why-2014-is-different-from-2001/

- 2020 Situation - https://www.reuters.com/article/us-health-coronavirus-argentina-fiscal-a/argentinas-hard-won-fiscal-progress-knocked-back-by-virus-idUSKBN2425HW; Inflation - https://www.reuters.com/article/us-argentina-inflation-idUSKBN1ZE2P0

- 2001 Real life stories - https://www.bbc.com/news/world-latin-america-15981406

Academic Articles

- Carmen M. Reinhart & Kenneth S. Rogoff & Miguel A. Savastano, 2014. "Addicted to Dollars," Annals of Economics and Finance, Society for AEF, vol. 15(1), pages 1-50, May

- Eichengreen, Barry & Hausmann, Ricardo & Panizza, Ugo, 2005. The Pain of Original Sin, The Mystery of Original Sin, and Original Sin: The Road to Redemption. Eichengreen & Hausmann 2005.

- Graciela L. Kaminsky & Carmen M. Reinhart, 1996. "The twin crises: the causes of banking and balance-of-payments problems," International Finance Discussion Papers 544, Board of Governors of the Federal Reserve System (U.S.), revised 1996.

[1] This case study was written by Ethan Ilzetzki and Bhargavi Sakthivel

- Setser, B., & Gelpern, A., 2006. Pathways Through Financial Crisis: Argentina. Global Governance, 12(4), 465-487. Retrieved July 30, 2020

- Rudger Dornbusch & Ilan Goldfajn & Rodrigo O. Valdés, 1995. "Currency Crises and Collapses," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 26(2), pages 219-294.

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Argentina's Economic Depressions

In 1908, Argentina had the seventh highest per capita income in the world, ahead of Germany or France and was growing faster than the United States. In 1912 with the introduction of the universal male suffrage, Argentina was a brand new democracy that was undertaking massive investments in education and infrastructure. With fertile lands and brimming potential, Argentina was considered a modern economy and was on the receiving end of several waves of European immigration.

"...the most cautious critic would not hesitate to aver that Argentina has but just entered upon the threshold of her greatness[2]".

Contrast this with the current situation. On May 22, 2020, Argentina missed its overdue interest payments and slid into its ninth sovereign debt default. Negotiations for the restructuring of its $66 billion debt are ongoing. Was it bad luck, poor government or bad economic policies that caused the decline of one of the richest nations in the 1900s?

In the next sections, we discuss the many varieties of Argentina's Economic depressions.

1. Commodity Cycles

In the 1960s, urban working class Argentinians spent about 15% of their income on beef alone, making it one of the 'wage goods'. Along with wheat, beef was also one of the main export goods of Argentina, which meant international price fluctuations in beef directly affected GDP and income disparities within Argentina. Economic growth therefore followed the cycle of international commodity prices, leading to a "stop-go pattern" for the

[2] Percy F. Martin, Through five republics (of South America) : a critical description of Argentina, Brazil, Chile, Uruguay and Venezuela in 1905 (New York, 1906). p. 2

Argentine economy. Local conditions were also directly tied to commodities. For example, a drought in 1951-52 decreased the export of these wage goods resulting in a recession. When international beef prices soared in 1969-70, this increased domestic beef prices and led to an economic boom. It also affected income inequality in the country by shifting income away from the urban working class, whose real wage decreased in real terms due to this inflation, and towards the rural workers, resulting in political strife (see Figure 1).

By the 1980s, beef and wheat exports declined in importance and soybeans, a commodity that was not a wage good and had no domestic market, began dominating Argentine exports. We will later see that exports were a large part of the Argentine economy during the 2001 currency crisis and the sharp decline in soybean prices in 2000 (see Figure 4 and Figure 5) played a part in triggering this crisis. But similarly, the rise in soybean prices in the mid 2000s corresponded with increased international demand for Argentine soy exports and was integral to its strong recovery from the crisis at the beginning of this century.

2. Hyperinflation

During the period 1973-1991, prices in Argentina rose by 300 percent per year. In July, 1989, alone inflation was at 200 percent, meaning that prices *tripled* in that single month. Prices at supermarkets and restaurants had to be updated every few hours (see Figure 2). Hyperinflation meant that middle income families' savings evaporated overnight. Households found themselves unable to purchase bare essentials resulting in a food shortage as riots broke out across the country. Not surprisingly, this was also a period of political turmoil with 13 Presidents and 21 Ministries of Economics serving during these 18 years.

We usually think of prices rising when the economy is booming and prices declining in a recession. But this isn't the case in periods of hyperinflation. Hyperinflation means that a government has lost control over the value of its currency. It becomes very difficult to make any long-term economic contracts in local currency, as no-one can be certain how valuable the currency will be even weeks in the future. Economic activity falters, as was the case in Argentina during this period (see Figure 1).

Governments facing hyperinflation turn to desperate measures. In Argentina, the currency had to be replaced several times as the older currency rapidly lost its value with rising inflation. The peso ley replaced the pesos moneda nacional at a rate of 100 to 1 in 1970 and was itself replaced by the peso argentino at a rate of 10000 to 1 in 1983. This was followed by the australes which replaced the ley at a rate of 1 austral equalling 1000 pesos argentinos between 1985 to 1991. And finally, from 1992, until now, Argentina has used the peso convertible which replaced the australes at a rate of 10,000 australes to 1 peso. Overall, since 1969, the current peso has a value of 10,000,000,000,000 (trillion) pesos moneda nacional, a massive decline in the value of the Argentinian currency (see Figure 3).

Argentina has since seen many such episodes of high inflation, although none as significant as the 1980s hyperinflation. In 2001, Argentina faced annual inflation rates of 40% and while Argentina managed to bring this under control, in 2019, inflation once again went out of control reaching 58%, the highest rate in 28 years.

3. International Financial Conditions

The year 1982 brought about an international financial blow-up - the Latin American (LATAM) Debt Crisis. Commonly known as La Década Perdida (The Lost Decade), it was a financial crisis that lasted through the 80s, where many countries in the region were unable to repay their foreign debts.

The Argentine government’s foreign debt was predominantly denominated in US dollars with adjustable interest rates. The peso was initially pegged in value to the US dollar, but investors feared that the government may devalue its currency and demanded that the debt be denominated in a “hard” currency, the US dollar.

Around this time, the US was also facing a period of the high inflation, with inflation hitting 14 percent by 1980. In October 1979, the US Federal Chairman Paul Volcker was appointed with the explicit objective of bringing down inflation. Volker increased interest rates aggressively to combat inflation (see Figure 8).

Given that the Argentine government was borrowing internationally and in dollars, high interest rates in the US naturally translated into high interest rates for Argentina (see Figure 9). This made debt servicing very costly for the Argentine government, which was forced to borrow merely to pay off the interest on old loans. Public debt of Latin American governments spiralled out of control and in August 1982, Mexico became the first country to stop repaying its debt. International currency markets became aware that this problem was plaguing most LATAM countries and many financial institutions and banks ceased or reduced lending in order to reduce their exposure to bad debt and Argentina became one of the countries to reschedule its debt payments in 1982. Eventually, unable to control inflation and following a series of unfortunate policies, Argentina went on default on their payments once more in 1989.

4. Currency Mismatches

Following a period of hyperinflation and riots, Argentina adopted a monetary reform (convertibility) which replaced the then Argentinian currency ‘the austral’ with the Argentine peso and fixed the exchange rate at one peso for every US dollar. This was meant to inherit the stability of the US dollar. A currency board was set up to ensure the credibility of this arrangement. The currency board was required to hold one US dollar in reserves for each peso in circulation so that the peso was fully backed one-to-one with US dollars.

Domingo Cavallo, the Minister of the Economy in 1991, justified the reform as a return to the prosperous period of the belle époque[3]:

"Argentina did have a very important historical period during which a market economy, with a relatively well-managed Government, was well integrated into the world economy. A monetary board produced very good economics results – going from 1890 to 1930. We had a monetary board that was created by Carlos Pellegrini. This was the President who had to face the great crises of 1889-90; this resulted in Argentina's failure to pay her debt because there had been tremendous overspending and borrowing abroad during the 1800s. Pellegrini's monetary board operated very well beginning in 1901. With a brief interruption during the First World War, it continued to operate until the big depression of 1929."

Initially, this economic strategy looked like it was working and as inflation came under control (see Figure 1 and 2). Further the government appeared to be managing its finances well as fiscal balances improved during this period. Argentine President Carlos Menem sought to closely impose and adopt the economic reforms recommended by the "Washington Consensus" and throughout the 1990s Argentina was a poster child for the Consensus, which espoused free-market principles and fiscal rectitude. These measures endeared Argentina to international lenders and Argentina became one of the world's largest emerging market borrowers. Like other emerging market economies, most borrowing was dollar denominated, as were many international and domestic transactions. With only a slight recession during the Mexican economic crisis of 1995, Argentina experienced reasonably healthy economic growth during most of the 1990s.

When the Asian financial crisis hit in 1998, things gradually unravelled. Argentina's neighbour, Brazil, devalued its currency relative to the dollar, making Brazilian exports cheaper relative to Argentine goods. To add to the country's woes, the US dollar was strengthening dramatically in the late-90s due to the US tech boom. The stronger dollar translated into a stronger peso, meaning that Argentine exports were becoming more expensive for international importers. Further, decreased demand from Asia brought a decline in prices of soybeans, one of Argentina's main exports (see Figure 4). The country found itself facing an increasingly weakening economy.

The government was truly in a bind. By the late 1990s, the country was already in recession, but it couldn't employ standard macroeconomic tools to help the economy recover. The currency board meant that the country had abandoned monetary policy as a stabilization tool. Investors' reluctance to lend to Argentina meant that the government couldn't borrow to finance deficits and use fiscal policy to emerge from the recession.

Government borrowing surged throughout the 1990s, with public debt to GDP going up from 29.5% in 1993 to 50.3% in 1999 (see Figure 6). But by the end of the decade the government was finding it difficult to finance its deficit. In 1999, in a desperate attempt to

[3] Cavallo, Domingo F. (1993, p.40), "The Convertibility Plan," in Proceedings of a Conference on Currency Substitution and Currency Boards, edited by Nissan Leviatan, Washington, DC: World Bank.

gain control of the fiscal balance, President De La Rúa, who succeeded Menem, raised taxes to lower the deficit, but this had an unfortunate negative effect on the economy.

By the early 2000s, foreign investors began to question whether all this could last. While the currency board was credible in principle, the hard peg of the peso to the dollar was becoming extremely politically painful to the Argentine government. But if Argentina abandoned the peg to the dollar, it would be harder for Argentina to repay foreign lenders: Argentina's tax revenues were denominated in pesos, but its foreign debt was dollar denominated.

Investors demanded increasingly higher interest rates to lend to Argentina, making it costly for the government to borrow new funds to repay old debts (or "roll over its debt") (see Figure 7). Ultimately, the government realised that it could no longer support the convertibility plan and let the peso "float", allowing its value to be determined in the free market (see Figure 3).

Within a month, the peso lost 2/3s of its dollar value, which made its foreign (dollar denominated) debt *triple* in value almost overnight. The government attempted to restructure debt by implementing a debt swap with some external financial aid but that too proved ineffective. But problems didn't end in public finances. Private banks had assets (e.g. lending to Argentine firms) denominated in pesos, but liabilities (e.g. dollar-linked deposits) denominated in foreign currency. In attempt to save the banks, Minister of Economy Domingo Cavallo announced a series of economic reforms in December, 2001.

Commonly known as the Corralito, these measures froze bank accounts, limited withdrawal of pesos and forbade withdrawals from dollar denominated accounts for a full year. In a cash dominated society where malpractices by banks were rampant, the Corralito ended up causing widespread panic and backfired, causing a series of domestic bank runs. Ultimately the government had to restructure the banking system and default on foreign debts which led to a long recession that only concluded by the end of 2002 (see Figure 1).

"I had recently received a lump sum in cash which we were going to use to buy a flat. But the money was frozen in the bank and when I eventually got it back it was just enough to buy a car."

- *Journalist Carina Etchegaray, BBC (about the 2001 Corralito and hyperinflation)*[4]

As should be apparent, currency mismatches were central to many of the problems Argentina faced. A government borrowing in dollars but with income in local currency faces the risk that it cannot repay its debts. Similarly, banks that are lending in local currency and accepting foreign currency are heavily exposed to the value of the currency. Why then did the government borrow in dollars? Why were so many domestic transactions denominated in dollars? This general phenomenon is known as domestic

[4] https://www.bbc.com/news/world-latin-america-15981406

dollarization whereby households, firms, and even governments in developing countries use a foreign currency for domestic purposes. Dollarization tends to be very persistent (Reinhart Rogoff and Savastano 2014) possibly due to a phenomenon known as “original sin” (Eichengreen, Hausmann and Panizza 2005).

Original Sin: *At some distant point in history, a government borrowed in dollars, because borrowing in local currency is more expensive than borrowing in dollars. This leads to a crisis due to currency mismatches. But then it becomes even more expensive to borrow in local currency, as foreign investors fear that the local currency will devalue. The government borrows in dollars once again, restarting the vicious cycle.*

Further, the combination of a currency crisis and a banking crisis is known as a “twin crisis” (Kaminsky and Reinhart 1996) although in reality it was more like a triple crisis, together with government default. In a highly dollarized economy, a devaluation of the currency harms both the government’s ability to repay foreign debts and the health of the banking sector. To make things worse, a government default harms banks’ balance sheets, because local banks hold much of the government’s debt. Further, a banking crisis hurts the government’s balance sheet because bailing out banks is costly.

5. Conclusion: The cycle is the trend

Each section above describes a different variety of crisis that Argentina has experienced in its history. Since its economy has largely depended on the export of a single commodity, fluctuations in the commodity price in international markets resulted in commodity cycles-booms and recessions. With hyperinflation, economic activity slows down and money loses one of its important functions—store of value—and hyperinflation episodes are accompanied by periods of slowdown.

As Argentina increases its borrowings in foreign currency and embraces dollarization, changes to exchange rate results in fluctuations in economic growth. This is because while its expenditure and debt servicing is in dollars, its income is denominated in its national currency resulting in wild mismatches between assets and liabilities when the exchange rate changes unfavourably. Further, dollarization can cause monumental increases in debt since interest rates within the country can adjust upwards if interest rates in international markets increase, thus increasing Argentina’s susceptibility to the world economic fluctuations and its chances of default which in turn causes deep recessions.

These crises, pervasive in developing countries tend to cause long-lasting damage to the economy. Historically, booms and busts in high income countries have tended to be temporary. But in emerging markets, they appear to leave permanent on economic growth. Aguiar and Gopinath (2004) conclude that in emerging markets, the ‘cycle is the trend’.

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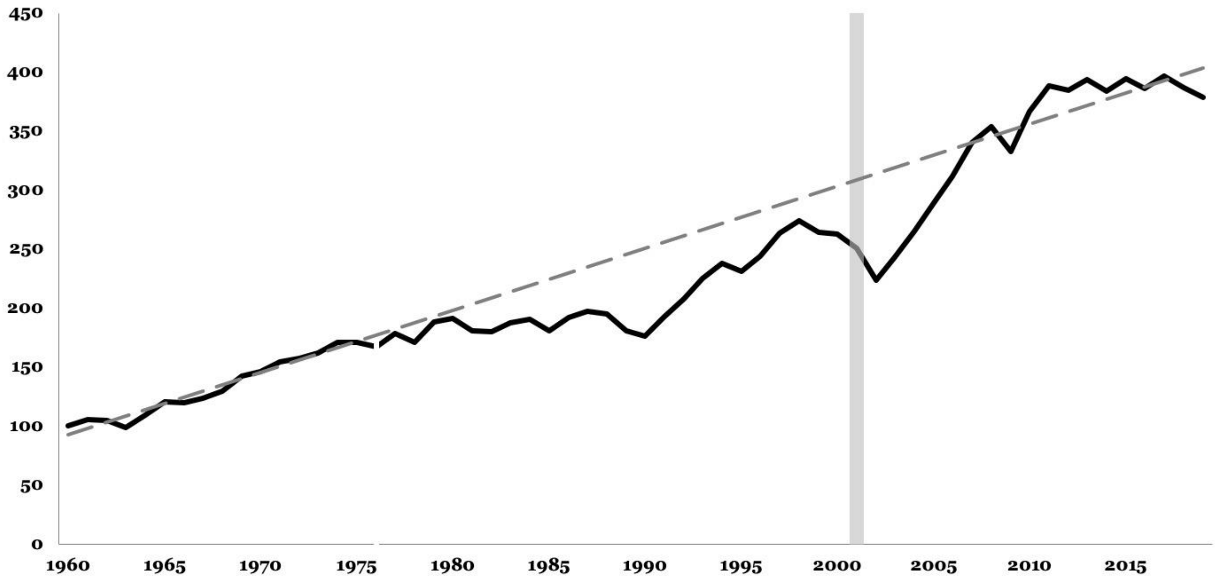
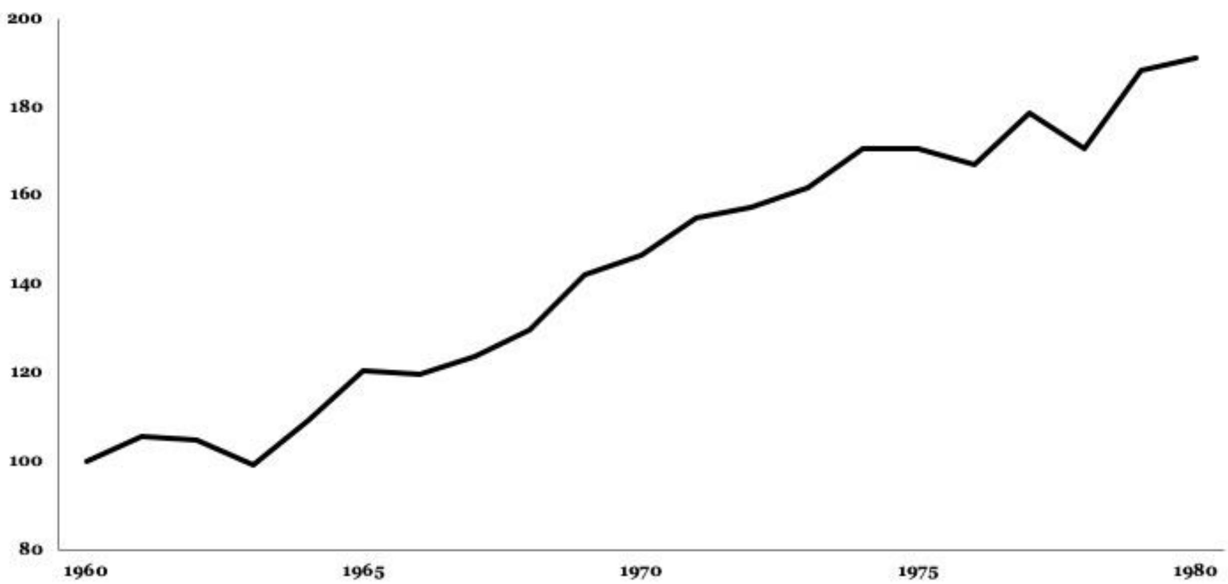
Figures

Figure 1: Argentina GDP (1960=100).
Source: World Bank.

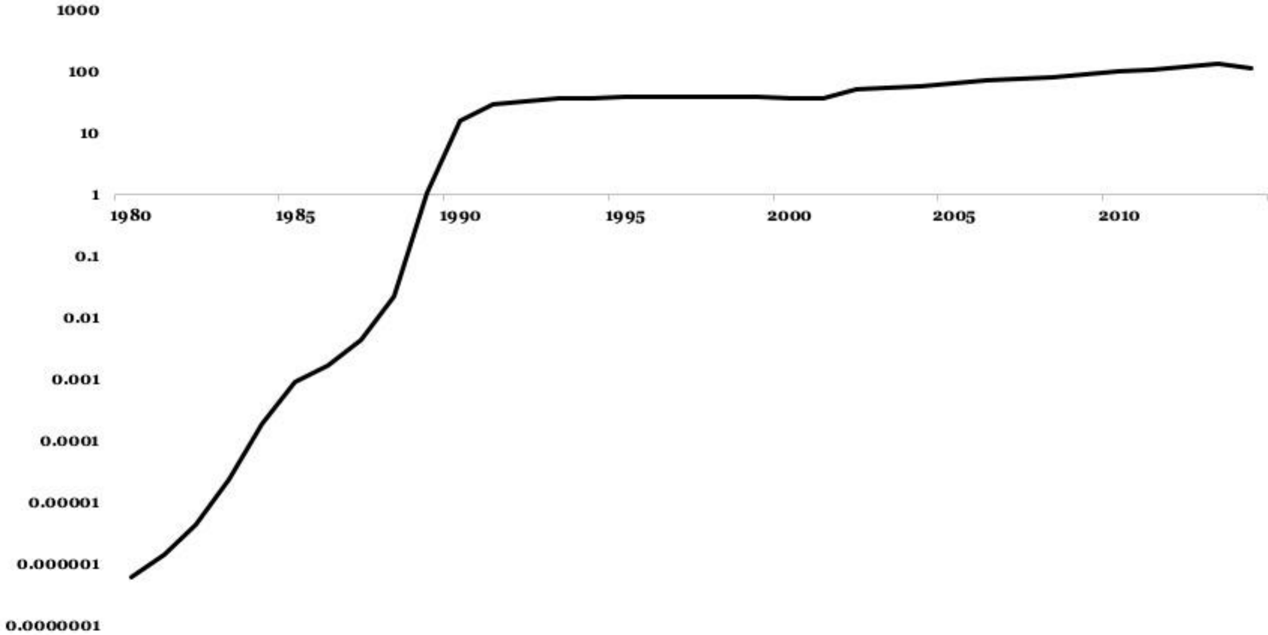


(a) 1960-2020. Dotted line is the trend line of the pre-1975 period. The vertical line identifies the crisis period in 2001.

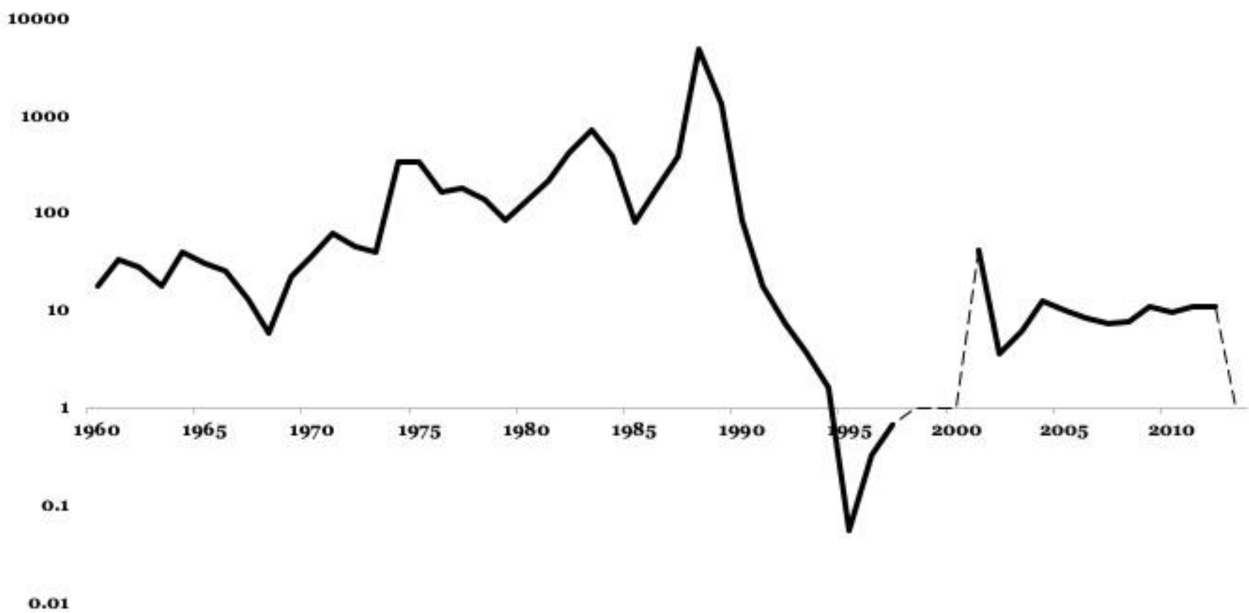


(b) 1960-1980

Figure 2. CPI and Inflation.
Source: World Bank

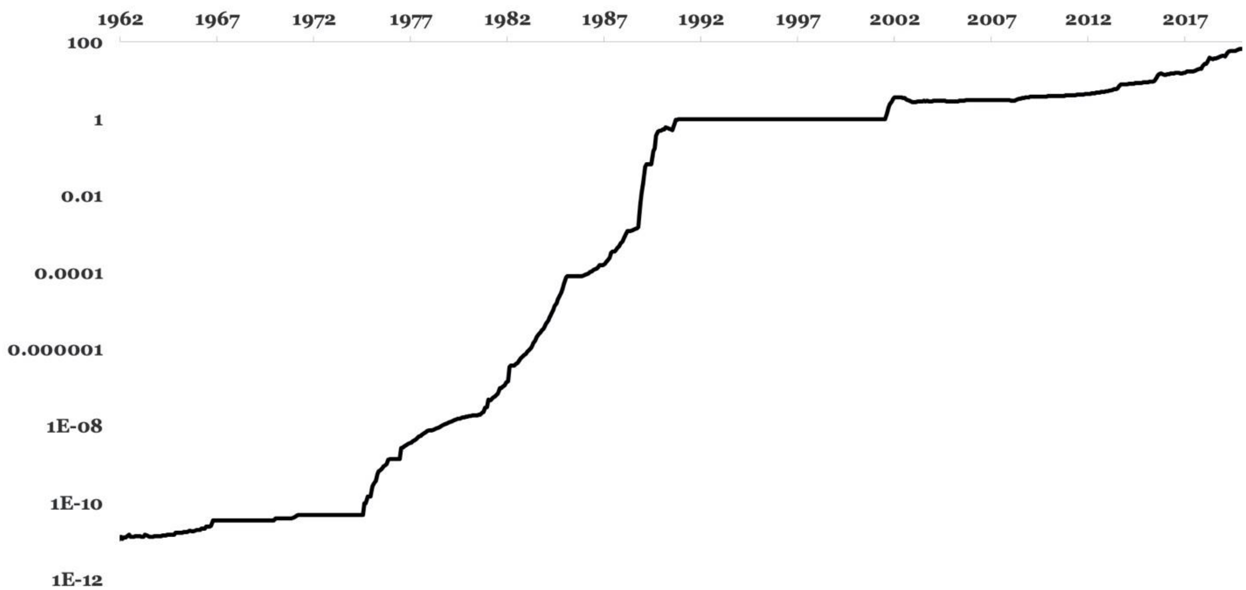


(a) CPI of Argentina (2010 = 100)

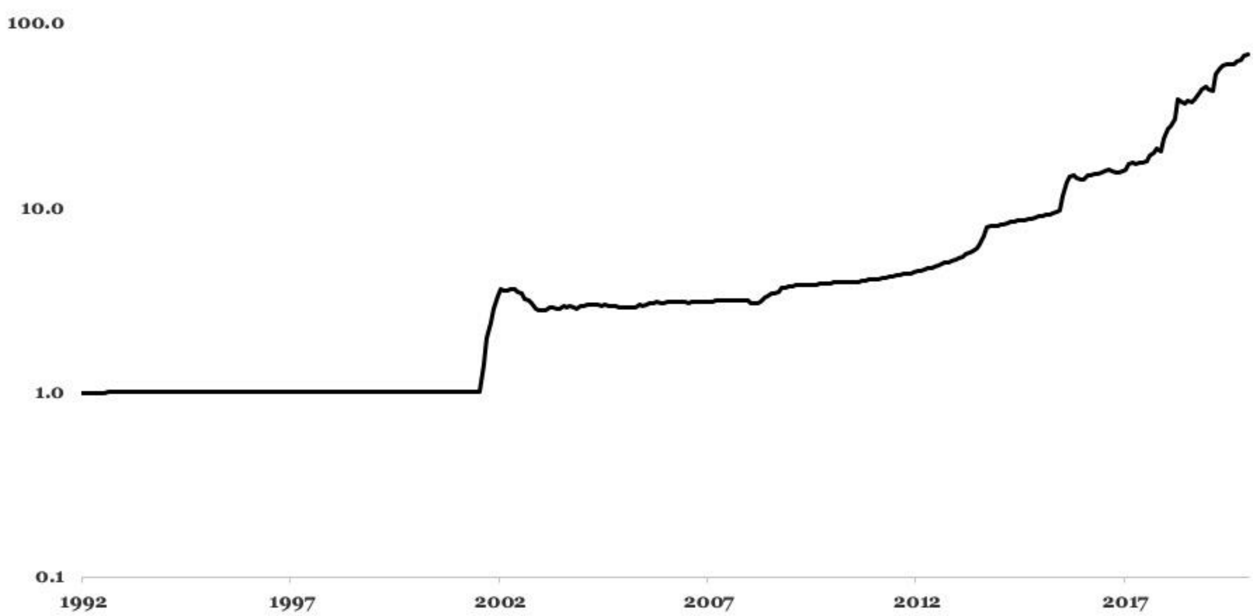


(b) Inflation (Annual percentage change in CPI) of Argentina (Logarithmic axis). Dotted lines represent years with negative inflation.

Figure 3: National Currency Units per US dollar, logarithmic axis.
Source: Organization for Economic Co-operation and Development (OECD)



(a) 1962-2020



(b) 1992-2020

Figure 4: Soybean Prices (yearly average) in US dollars (Grey line, right axis) and Argentine GDP (and the black line, left axis).
Source: Macrotrends, World Bank

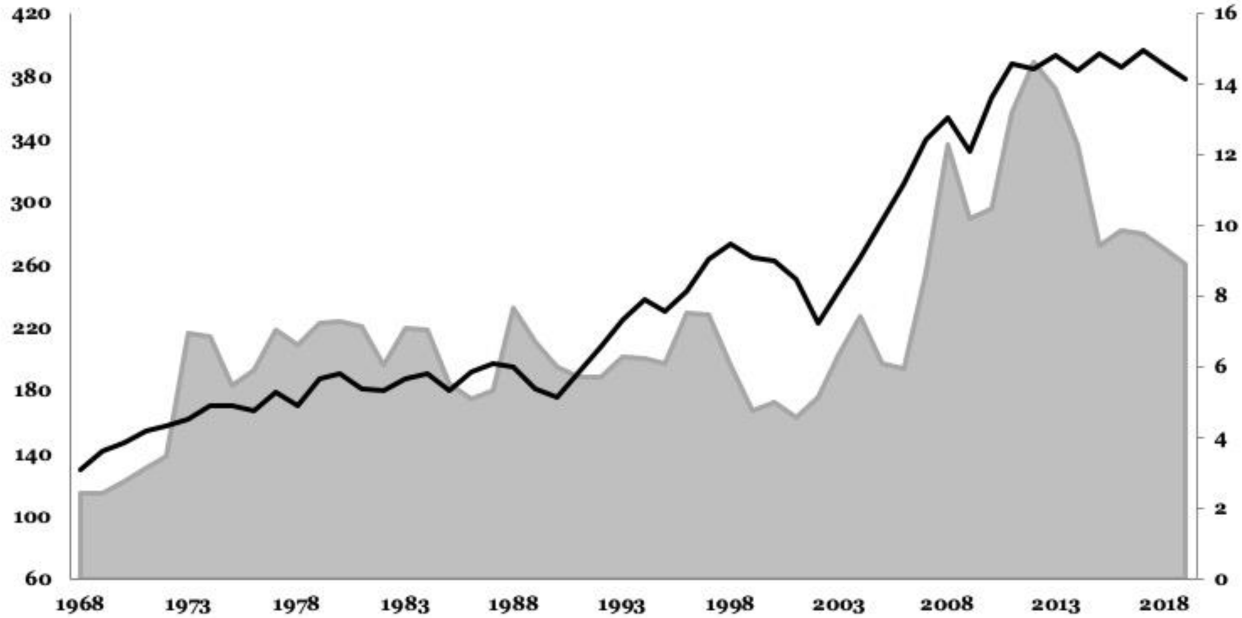


Figure 5: Exports (% of GDP).
Source: World Bank

Figure 6: Debt-to-GDP ratio.
Source: International Monetary Fund

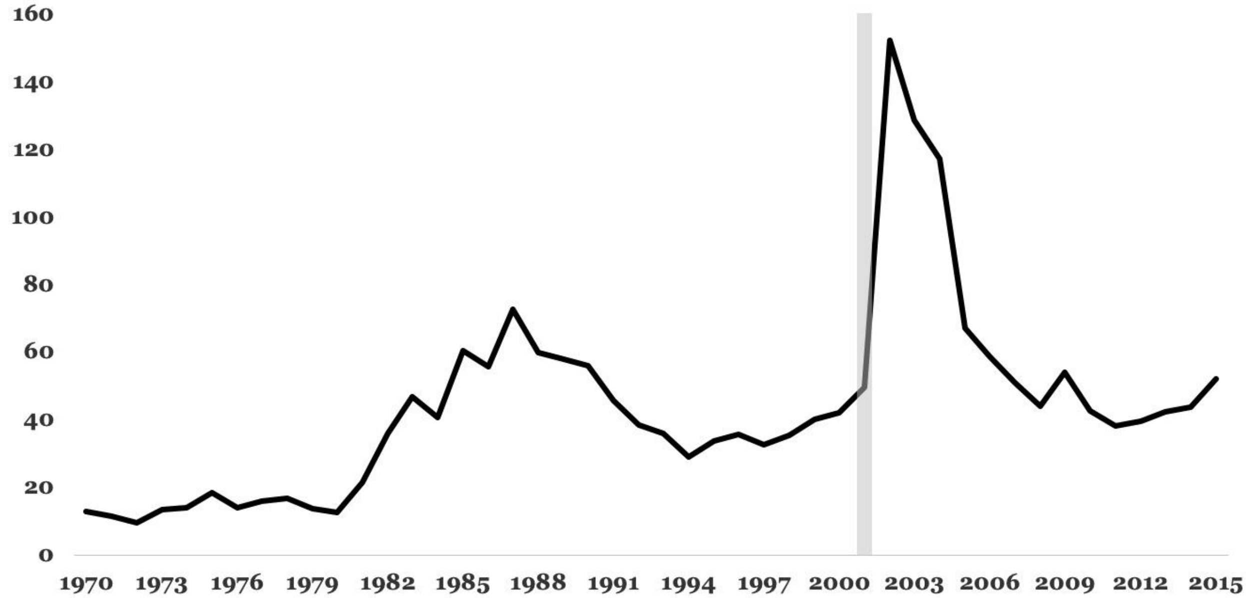


Figure 7: Interest Rate on Public Debt.
Source: International Monetary Fund

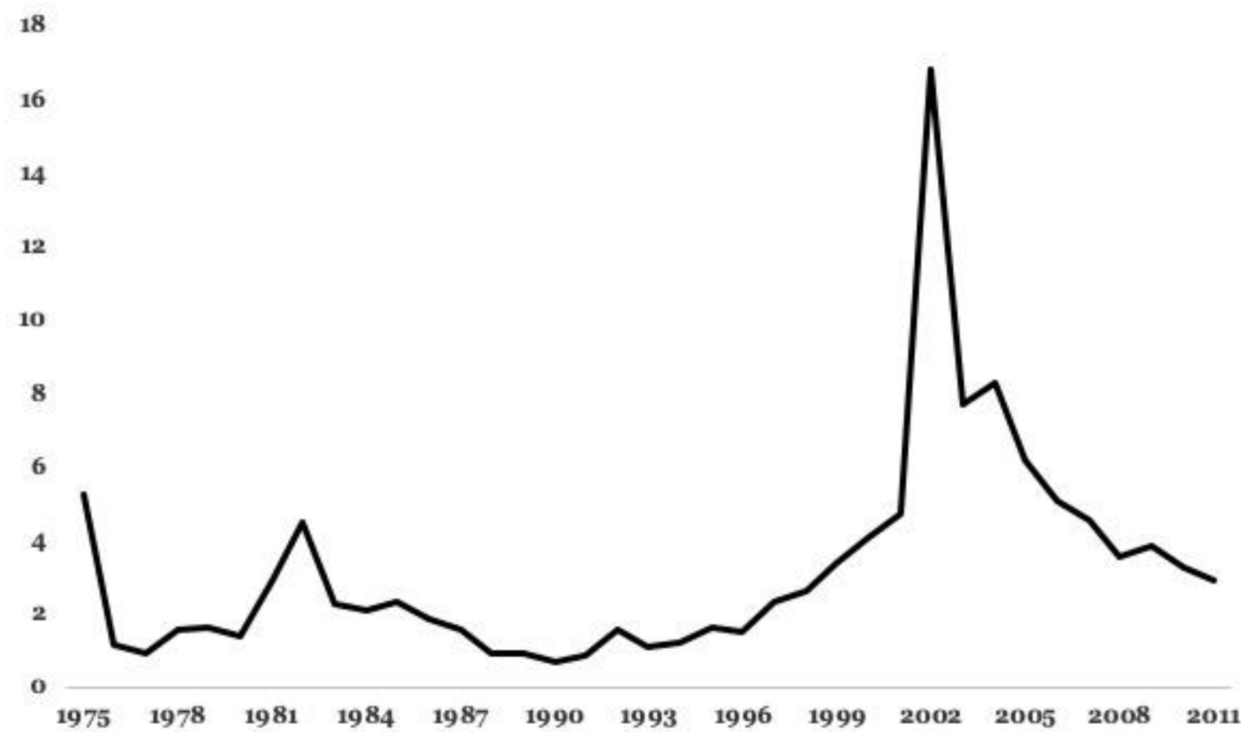


Figure 8: Interest (Discount) Rate in the US.
Source: International Monetary Fund

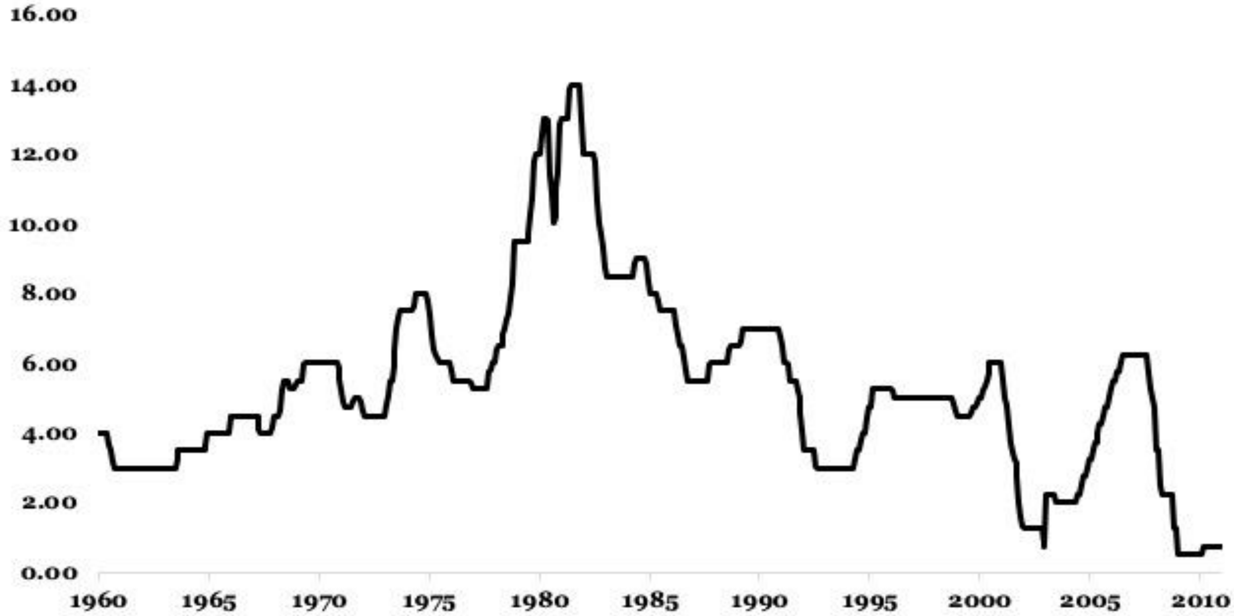
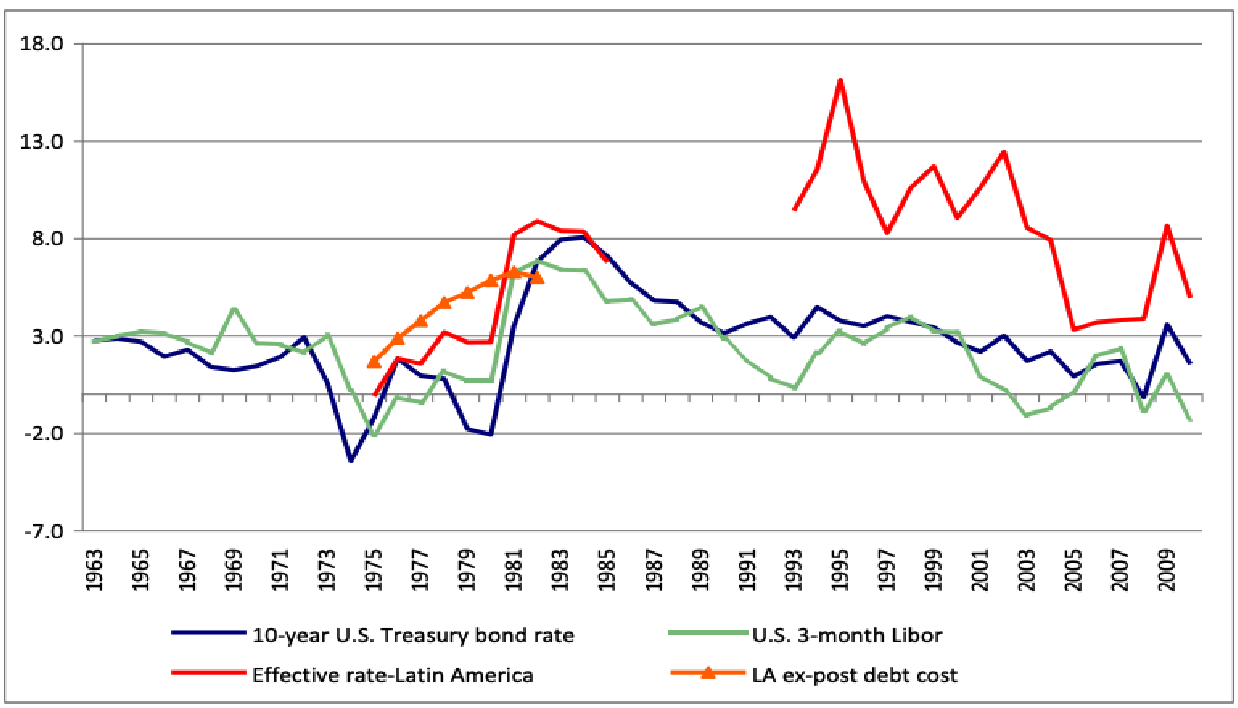


Figure 9: Interest rates in Argentina, Latin America, and the US
Source: Bertola and Ocampo (2012) and sources cited therein[5]



[5] Bertola, Luis and Ocampo, Antonio (2012) Latin America's debt crisis and "lost decade". In: Learning from Latin America: Debt crises, debt rescues and when and why they work, 20 Feb 2012, London, UK. (Unpublished) -

Glossary

- Dollarization: The use of the US dollar or other foreign currency as a medium of exchange alongside or in place of its domestic currency.
- Washington Consensus: A set of free-market economic policies endorsed by the International Financial Institutions (the International Monetary Fund, the World Bank) during the 1990s and were used as recommendations for developing countries in crisis.
- Currency Mismatch: A mismatch between the currency denominate of assets and liabilities on a firm's, bank's, or government's balance sheet.
- Discount rate: Interest rate that a central bank charges on its loans to commercial banks and other financial institutions

Discussion Questions:

1. **We have learned about the role of monetary and fiscal policy as stabilization tools available to high income countries. To what extent are they available to country at Argentina's stage of development?**

2. **Which policies could help a country become less dependent on commodity prices?**

3. **What can a commodity-dependent country do when commodity prices decline?**

4. **What are the causes of hyperinflation?**

5. **How can a country combat hyperinflation once it begins unfolding?**

6. **How can a developing country become less exposed to financial conditions in the US or other high-income countries?**

7. **How can a government avoid twin crises and get out of the vicious cycle of domestic dollarization?**

8. **What policy tools are available once a country hits a twin crisis?**