A Journey in the History of Sovereign Defaults on Domestic Law Public Debt – Sovereign Histories

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**Introduction**

This document contains our collection of **sovereign histories for the 74 domestic-law default episodes that we include in our database.** Sovereign histories are meant to complement our database and the associated paper, providing the full details of domestic-law defaults and restructurings. As we detail in the paper, domestic-law default were identified consulting a large number of sources including country reports and program reviews from the IMF, documents from the World Bank and the OECD, Public Information Notes, policy reports from development banks and other international institutions, accounts from Ministries and Central Banks, rating agencies publications, debt exchange offers, academic books, research papers, an extensive google search, and a press review through Factiva. The vastity and the diversity of the sources we consulted makes us confident that our coverage is close to the universe of domestic-law defaults from 1980 to 2018.

Histories are organized in alphabetical order from Angola to Zimbabwe. Each history is structured in two sections. The first section provides an overview of the events leading to either the default or the restructuring. The second section provides the full details of the restructuring process for each instrument and each creditor involved. The information presented in each history is meant to capture the complexity of sovereign default restructurings and makes our collection of sovereign histories a unique and valuable source of examples for the ongoing policy and academic debates.
Angola (1992)

Framing the crisis

Starting in the 1970s, Angola’s economy struggled for almost 20 years amid interluded warfare and anti-colonial campaigns that had started before the country’s independence from Portugal in 1975. Angola was also plagued by a long default episode from 1992 to 2005. The defaults occurred as a civil war resurged in 1992 when some political factions refused to recognize the outcome of the elections.

While the oil industry prospered during the war thanks to offshore production, the non-oil sectors of the economy tanked with GDP contracting by 21 percent in 1993. Government policies also contributed to the weakening of the Angolan economy. The loose fiscal stance led to the accumulation of large fiscal deficits, averaging 27 percent of GDP from 1992 to 1996, and triggered hyperinflation (IMF, 1997). These deficits were largely financed by the domestic banking system, the national central bank, and the accumulation of arrears with domestic creditors. Despite attempting to end the civil war through a truce in 1994, the war resumed in late 1998, causing a 0.5 percent contraction of GDP in 1999 and putting new pressure on public finances (IMF, 2000). At the time, oil-backed commercial loans and external payment arrears were the main source of external financing. Meanwhile, domestic arrears increased sizably as the Government did not rescale its budgetary commitments and central bank financing declined substantially (IMF, 1997, 2000).

Details on domestic debt restructuring

Angola’s domestic default involved US$7 billion of domestic arrears and an official sector intervention (IMF, 2015; Montiel, 2003). Of this total, limited information regarding its counterparts was available. According to the IMF (2003, 2005a) Angola accumulated the following domestic arrears:

- US$ 55 million in 1995;
- US$ 405 million in 1996;
- US$ 54 million in 1997 (IMF, 2000);
- US$ 255 million in 1998;
- US$ 195 million in 1999;
- US$ 1.995 billion in 2000;

The government continued accumulating arrears following the end of the civil war in April 2002 (IMF, 2003, 2005b). According to Gasha and Pastor (2004), Angola accumulated an additional US$ 550 million of domestic arrears during the first half of 2003, which is equivalent to 4.5 percent of annual GDP.³

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¹ Public expenditure reached 57 percent of GDP in 1999 mostly as a result of military spending, which reached 22 percent of GDP in 1999.
² The country signed an agreement with Russia in 1996, which resulted in reducing arrears by U.S. $3.6 billion, rescheduling of around U.S. $1.6 billion of non-military debt, and forgiveness of U.S. $4 billion of military debt (IMF, 1997).
³ The amount is computed by using the exchange rate reported in IMF (2007) of 74.6LCU per U.S. dollar.
Information on the settlement is limited. The IMF (2000) reports that US$ 341 million were repaid in 2001. In September 2003, authorities adopted a new macroeconomic program to stabilize the economy and reduce the country’s reliance on domestic banks and the central bank for funding purposes (IMF, 2005b). With the aim of primarily clearing arrears with domestic suppliers, treasury bonds were issued in 2003. Short- and long-term Treasury bills were also introduced for open market operations and to replace short-term central bank bills (IMF, 2005b, 2007). According to the IMF (2005a, 2007), later in 2005 US$ 650 million of arrears to domestic suppliers were cleared through securitization. To this end, the government issued US$ 274 million of two- to seven-year long-term bonds and US$ 376 million of short-term Treasury bills (with 30-, 90-, and 180-day maturities).

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4 According to the Government of Angola (2001), U.S. $250 million of the domestic arrears were settled in 2001: U.S. $100 million were paid in cash and U.S. $150 million through the issuance of an indexed bond. Each repayment received the same proportion of cash to bonds: 1 to 1.5.

5 Domestic open market operations started in 1999, with the introduction of central bank bills.
References


Framing the crisis

Before the Great Recession, Angola had experienced a rapid economic expansion fueled by its growing oil sector. Fiscal and monetary policies remained pro-cyclical in those years, with the non-oil fiscal deficit-to-GDP ratio reaching 70 percent and broad money growing at 90 percent in 2008. These conditions over-exposed the country to the sudden drop in oil exports in 2008 (IMF, 2009).

The decline in oil prices, which fell from US$ 97 per barrel in 2008 to US$ 44 in the first quarter of 2009, caused a drop in government revenues, exacerbating fiscal imbalances. Market confidence deteriorated and the demand for government bonds dropped. Additionally, some government sectors initiated projects without the necessary budget commitment, which flouted established fiscal rules. As a result, the Government rapidly accumulated domestic arrears (Jensen and Paulo, 2011; IMF, 2009, 2015).

Details on domestic debt restructuring


In order to pay back domestic arrears, the Government followed the framework devised by the Council of Ministers in 2010. According to this strategy, creditors were divided into three groups—small, medium, and large—and their claims were treated differently. Specifically, the 2010 framework established the following:

- Full payment for claims less than US$ 30 million (to be completed by the end of 2010).
- US$ 30 million of payment in 2010 for claims ranging between US$ 30 and US$ 75 million, with the remaining part to be paid in the first half of 2011.
- 40 percent repayment by the end of 2010 for claims larger than US$ 75 million, with the remaining part to be paid in the first half of 2011 (IMF, 2010a, 2010b).

By December 2010, US$ 0.66 billion of accumulated arrears from short-term loans were cleared with cash. The remaining US$ 1.14 billion of arrears from short-term loans were cleared when the Government issued foreign currency-denominated securities with a three to five years maturity and a 7 percent coupon (IMF, 2011; Government of Angola, 2011).

PIP arrears amounting to US$ 3 billion were cleared in cash (mostly local currency) in October 2010. An additional US$ 0.72 billion was cleared in July 2011. In August 2011, US$ 1.98 billion, owed to domestic suppliers, was cleared through the issuance of short-term securities that were set to be repaid in monthly installments between September 2011 and May 2012 (IMF, 2011; Government of Angola, 2011). In order to pay the US$ 1.98 billion, slightly different conditions from the 2010 framework were established; creditors with claims smaller than US$ 12 million were paid fully in cash, whereas creditors with larger claims were

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6 Originally, the government claimed the amount was U.S. $4.5 billion.
repaid partly in cash and partly in instalments, with varying conditions depending on the size of the claim (IMF, 2011):

- for claims lower than US$ 50 million, the noncash repayment was settled in six equal monthly instalments, starting by the end of September 2011;
- for claims larger than US$ 50 million, the noncash repayment was settled in nine equal monthly instalments, starting by the end of September 2011.

Table 1 summarizes the structure of the arrears clearance operation.

Table 1: 2008–09 arrears clearance

<table>
<thead>
<tr>
<th>Angola: Arrears Clearance Operations, 2008–09</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total stock of verified arrears, completed Feb 2011</td>
<td>7.50</td>
<td></td>
</tr>
<tr>
<td>Of which: Public Investment Program (PIP) arrears</td>
<td>5.70</td>
<td></td>
</tr>
<tr>
<td>Short-term bank loans</td>
<td>1.80</td>
<td></td>
</tr>
<tr>
<td><strong>PIP arrears clearance operations</strong></td>
<td>-5.70</td>
<td></td>
</tr>
<tr>
<td>Cash payments towards PIP arrears (Sep–Oct 2010)</td>
<td>-3.00</td>
<td>Local currency equivalent</td>
</tr>
<tr>
<td>Cash payments towards PIP arrears (Apr–Jul 2011)</td>
<td>-0.72</td>
<td>Local currency equivalent</td>
</tr>
<tr>
<td>Securities to clear PIP arrears (Aug 2011)</td>
<td>-1.28</td>
<td>Short-term instruments repaid in monthly instalments, Sep 2011–May 2012</td>
</tr>
<tr>
<td><strong>Short-term bank loan arrears clearance operations</strong></td>
<td>-1.80</td>
<td></td>
</tr>
<tr>
<td>Cash payment towards bank debt (Dec 2010)</td>
<td>-0.66</td>
<td>Local currency equivalent</td>
</tr>
<tr>
<td>Securities to clear bank debt (Dec 2010)</td>
<td>-1.14</td>
<td>3-5 year bonds, fx-linked, 7 percent coupon</td>
</tr>
<tr>
<td>Sources: Angolan authorities and IMF staff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After the audit report had been completed, around US$ 378 million of additional 2008–09 PIP arrears were identified and settled according to the 2010 framework (IMF, 2011). According to the IMF (2012), these domestic arrears were finally settled in 2012.

To finish the process, a separate clearance was conducted for arrears accumulated from 2010 to 2012. In June 2013, verified and unverified claims amounted to US$ 6.05 billion (mostly owing to the Ministry of Construction). A plan to regularize these arrears was approved in July 2013. In January 2014, the Government cleared US$ 4.44 billion and scheduled the payment of the remaining arrears owed to the Ministry of Construction (US$ 0.01 billion) for 2014.7

Table 2: 2010–12 arrears clearance

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7 Payment of unverified claims was pending the completion of the verification process (IMF, 2014).
Following these clearance operations, authorities introduced measures to strengthen budget institutions and protect against the recurrence of arrears (IMF, 2014). Despite these measures, domestic payment arrears re-emerged multiple times in Angola, such as in late 2014 (IMF, 2015a) or 2017 (IMF, 2018).
References


Antigua and Barbuda (1998)

Framing the crisis

Antigua and Barbuda’s economy largely relies on tourism. The four hurricanes that hit the region in the 1990s seriously damaged hotels, roads, and other infrastructure across the country (IMF, 2004). As a result, economic growth slumped, and its fiscal deficit widened considerably.8

As access to external financing through offshore banks became increasingly difficult, the government partly met mounting debt payments with government revenues (almost 35 percent of government revenues were earmarked for debt service at the end of 2003) and domestic banks provided revolving credit facilities.9 As reported by Reinhart and Rogoff (2011), the government defaulted on domestic debt in 1998, and began to cumulate payment arrears to domestic banks, the Social Security Scheme, and domestic suppliers (IMF, 1998, 2004).

After taking office in March 2004, the newly elected government engaged in negotiations with domestic creditors to deal with the large stock of debt (amounting to 120.15 percent of GDP) and to clear outstanding arrears (IMF, 2005).

Details on domestic debt restructuring

In November 2004 the Antiguan government and domestic banks agreed to consolidate and reschedule existing loans to the government (Government of Antigua and Barbuda, 2006). To this end, domestic banks reduced interest rates by 1 to 3 percentage points on existing loans, ranging between 10 and 15 percent at the time of the restructuring. Since we do not have information on the exact amount involved in the operation, in our dataset we assume that all outstanding bank loans (US$ 128.9 million at the end of 2004, or 15.7 percent of GDP) were involved in the restructuring (IMF, 2004, 2006). As indicated in Reinhart and Rogoff (2009), bank loans were denominated in local currency.10

Two additional agreements were reached in 2004, with domestic commercial creditors clearing a total of US$ 34.85 accumulated arrears (IMF, 2006). The total relief provided to the government in 2004 amounted to E.C. $545 million. An agreement with the Italian government cleared E.C. $529.2 million (US$ 196 million) through a one-off payment of US$ 18.5 million (IMF, 2005). The remaining part represents the arrears-clearing operation with domestic commercial creditors. In 2005, Antigua and Barbuda undertook an external debt buyback operation with private creditors. This restructuring, which the existing databases on sovereign

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8 The dismal fiscal performance was also driven by the authorities’ difficulties in monitoring expenditures and by the introduction of a very expensive vocational training scheme. Under the scheme, wages were paid by the government for the apprenticeship of individuals entering both the public and private sectors (IMF, 1998).

9 These credit lines were obtained from banks in exchange for earmarking fiscal revenue to the servicing of loans.

10 In 2004, the government introduced a National Debt Coordinating Committee to improve debt management, establish a debt strategy, and to guide the debt restructuring process (Antigua Ministry of Finance, 2013). The government left the Treasury bill securities, issued on the Regional Government Security Market (RGSM), out of the implementation of the Debt Strategy (Government of Antigua and Barbuda, 2006).
defaults do not cover, lowered Antigua and Barbuda’s debt by approximately US$ 500 million (Yartey and Turner-Jones, 2014).
References


Antigua and Barbuda (2008)

Framing the crisis

Following years of fiscal imbalances, the Global Financial Crisis severely strained Antigua and Barbuda’s government finances. In the same year, the country, along with the entire Caribbean region, was also severely hit by Hurricane Omar (Government of Antigua and Barbuda, 2011, p. 3).¹¹ These shocks caused budgetary problems for the Government that resulted in a default on a portion of its domestic debt in December 2008 (Asonuma et al., 2017). Economic growth collapsed from 12.74 percent to -9.6 percent from 2006 to 2009. The GDP contraction was accompanied by a decline in government tax revenue, which declined more than 20 percent in 2009. These events worsened the already precarious fiscal position of the Antiguan government, with the fiscal deficit rising from 6 percent in 2008 to roughly 19 percent in 2009. Meanwhile, the debt-to-GDP ratio reached 115 percent in 2009. Lacking alternative sources of financing, payment arrears peaked at 53 percent of GDP in 2009, making a debt restructuring necessary despite government attempts to boost revenue generation (Newswire, 2005; Schipke, Cebotari, and Thacker, 2013). In the beginning of 2009, the Government announced a restructuring program aiming to cut interest rate payments in 2010 by 4.5 percent of GDP (IMF 2010).

Details on domestic debt restructuring

In June 2010, the IMF approved a standby arrangement conditional on fiscal adjustments, structural reforms, and debt restructuring to eliminate arrears and obtain debt service relief (Schipke, Cebotari, and Thacker, 2013). The restructuring exercise focused on both loans from domestic banks and accumulated arrears, all of which were denominated in Eastern Caribbean dollars (IMF 2010).

The restructuring process, which involved US$ 259 million of bank loans, started in 2009 and ended in May 2010 (Asonuma et al., 2017).¹² Voluntary restructuring arrangements with commercial indigenous banks mainly extended maturities to 15 - 20 years (from an average of 5 years) and reduced interest rates to 8 percent from an average of 13 percent (IMF, 2010, 2013; Government of Antigua and Barbuda, 2011a). Estimates of NPV haircuts range between -2.7 percent and 13 percent (Asonuma et al., 2017). As of the end of 2009, Antigua and Barbuda had also accumulated US$ 9.93 million of arrears on domestic government securities. According to the IMF (2010) and the Government of Antigua and Barbuda (2013), arrears were paid back in cash in 2010, as debt issued in the Regional Government Security Market, Development Bonds, and Treasury bills were excluded from the restructuring.¹³


¹² Durant (2012) reports U.S. $555 million as the amount of domestic debt restructured. From this, U.S. $296.29 were related to public-sector arrears (Government of Antigua and Barbuda, 2011b). The difference, U.S. $259, concerned bank loans.

¹³ In September 2010, the government also agreed to restructure its bilateral debt with Brazil, France, Japan, the Netherlands, the United Kingdom, and the United States through the Paris Club. The size of the restructuring was E.C. $390 million (U.S. $144.44 million), of which E.C. $275 million was in arrears. Under the terms of the agreement, the debt’s face value was not reduced, but repayments were rescheduled: Antigua and Barbuda was required to pay 10 percent of its bilateral debt in the 2012-2016 period and the remaining part between 2017 and 2024. The net present value of savings related to this restructuring intervention is estimated to be between 25 and 30 percent.
After an initial proposal in February 2008, the government signed agreements in September and October 2010 with the boards of the Medical Benefits Scheme and the Social Security System to clear longstanding intra public sector arrears owed from 1979 to 2009 (Government of Antigua and Barbuda, 2011b; IMF, 1999; Monroe, 2009). These agreements regularized almost E.C. $800 million (US$ 296.29 million) of arrears and reduced the face value of outstanding debt by about 15 percent of GDP (Government of Antigua and Barbuda, 2011b). This episode also involved other domestic arrears accumulated from 1994, mainly to domestic suppliers, and from 2003 also on wages (IMF, 2004). As reported by the IMF (2004b; 2010), outstanding stock of other domestic arrears amounted to E.C. $16.2 million in 1999 and peaked at E.C. $198.4 million (US$ 73.48 million) at end 2009 (Government of Antigua and Barbuda, 2011). In 2012, the Government negotiated repayment plans with several suppliers (IMF, 2012).

The entire stock of outstanding debt with statutory bodies was in arrears. In 2007, the government had already signed an agreement with the Board of Education to clear U.S. $38 million of domestic arrears (IMF, 2010).

Outstanding liabilities, owed to Social Security and Medical Benefits, were converted into long-term bonds featuring a 30-year maturity (bonds were scheduled to mature in 2040), 20-year deferred principal payments, and an interest rate hike from 1 percent to 6 percent (Government of Antigua and Barbuda, 2011a). As reported by the consultancy company Morneau Shepell (2015), repayment terms for Social Security included a disbursement of U.S. $330 million payable in 20 semi-annual amounts, starting in January 2031, with semi-annual interest payments from 2010 to 2041 at interest rates increasing from 1 percent, in 2010, to 6 percent after July 2021.

We could not find any additional information on how domestic arrears with suppliers were cleared.
References

Antigua and Barbuda Meteorological Service (2008), October.


Argentina (1989)

Framing the crisis

Against the background of large primary fiscal imbalances, and quasi-fiscal deficits in public banks, the Government of Argentina removed existing price controls in 1984 (Cooney, 2007). The policy change led to a sharp increase in inflation and to a depreciation of the peso. To remedy the situation, the government launched two plans to anchor the price level and stabilize the exchange rate by maintaining high domestic interest rates: The Primavera Plan (August 1988) and the Bunge y Born Plan (July 1989). Yet the high rates pushed debt-servicing costs up considerably, which necessitated issuing additional debt, and also casted doubts on the solvency of the sovereign (Beckerman, 1992). Simultaneously, Argentina experienced a credit boom, with most new credit directed towards the public sector. According to Moody’s (2017), the doom loop between banks and sovereign complicated the restructuring of government debt significantly. Following the failure of the Bunge y Born Plan (BB plan), internal debt accumulation soared.

Details of domestic debt restructuring

In December 1989, with US$ 650 million (out of US$ 7 billion) of domestic debt maturing in March 1990, the government announced a unilateral plan to exchange maturing claims for a new interest-bearing Bonex. However, in a matter of a few days, the government partially withdrew the plan, claiming it would first attempt to redeem the maturing debt in cash (Ter-Minassian and Schwartz, 1997). In the end, the forced exchange of short-term U.S. dollar-denominated maturing government bonds into 20-year dollar-denominated Bonex occurred in December (Welch, 1991; Moody’s, 2008). As the conversion was forced, we assign a 100 percent participation rate to this episode.

In January 1990, the government announced the “Bonex plan.” According to the plan, US$ 3 billion of austral-denominated time deposits (seven-day deposits called “plazo fijo”) were converted into 10-year U.S. dollar-denominated long-term bonds at the prevailing exchange rate on December 28, 1989. The new bonds, called Bonex 89, matured in 1999, had a two-year grace period, and a variable yield equal to LIBOR plus a small spread. The original interest rates the deposits paid were instead around 4.5 percent in December 1989 (Beckerman, 1992; Garcia-Herrero, 1997). To increase the appetite for Bonex, interest payments were scheduled monthly (as opposed to the standard semi-annual frequency for government bonds). Since Bonex traded at a discount (30 percent of par), and the discount was expected to widen with the stock of outstanding Bonex, the conversion resulted in an estimated 70 percent loss for depositors (Moody’s, 2008; Laeven and Valencia, 2008).

\[17\] According to Moody’s (2008), the government had already stopped the repayments for most of the outstanding Treasury bond issues.

\[18\] The related law is Decreto 36/90.

\[19\] Austral was the new currency created in 1985 (World Bank, 2003; Welch, 1991). The conversion excluded the first $500, special accounts (such as charitable foundations), and funds proven to be used for tax or salary payments (Krikorian, 2010).
Finally, in October 1990, the government converted US$ 8 billion in frozen debts to contractors and others into 10-year negotiable indexed government bonds with a real interest rate of 8 percent (Welch, 1991). In our dataset, this value is reported as an arrear.
References


Argentina (2001)

Framing the crisis

In 1991, the government introduced the convertibility regime. This regime is a currency board that established a one-to-one parity between the peso and the U.S. dollar to combat hyperinflation and stabilize the economy.

Access to international financial markets became increasingly difficult in the late 1990s with spillovers from the Asian, Russian, and Brazilian financial crises. High external borrowing costs strengthened reliance on domestic financing, particularly from banks and pension funds (de la Torre, Yeyati, and Schmukler, 2003). Additionally, the decline of commodity prices and the appreciation of the U.S. dollar eroded competitiveness with its main trading partners (Jonas, 2002), and exacerbated currency mismatches in the country’s financial system.

Abandoning the convertibility regime and devaluating the currency posed a big threat to financial stability due to the large volume of U.S. dollar-denominated debt held by non-dollar earners. The government, therefore, implemented a number of policies to stabilize debt and preserve the convertibility regime, including a dual exchange rate system, taxes on financial transactions, financial engineering operations (like the mega-swap), moral suasion on domestic investors to purchase domestic debt (“Patriotic” bonds), deposit freezing (“Corralito” and “Corallon”), and coerced restructuring of domestic debt. Eventually, attempts to save the convertibility regime failed, and authorities were forced to default and abandon the currency board in December 2001.

Details of domestic debt restructuring

Before defaulting on its international bonds in December 2001, the government had relied heavily on domestic resources to compensate for lost access to international financial markets.

In March 2001, Argentina suspended an auction of US$ 350 million because Economic Minister Cavallo did not accept the yields banks demanded and requested more favorable bids. In April, local banks and pension funds purchased the so-called Patriotic bonds. The bonds consisted of three instruments: a US$ 2 billion bond with a 9 percent coupon and a one-year maturity, a US$ 1 billion bono-pagaré with a three-year maturity floating rate (the first coupon was of 11.73 percent), and a US$ 500 million bono especial (Dow Jones International News, 2001a, 2001b; Latin Finance, 2001; Zlotnik, 2001).

In May 2001, Cavallo proposed the so-called mega-swap plan. Under the plan 52 bonds worth US$ 30.4 billion (U.S. dollar and peso denominated) were exchanged for five new bonds (IMF 2003b, 2004). The swap was completed on June 3, 2001 and aimed to preserve some of the features of the exchanged debt. Long-term bonds were swapped with long-term bonds; fixed-rate coupon bonds were swapped with fixed-rate coupon bonds; and U.S. dollar-denominated bonds were swapped with U.S. dollar-denominated bonds (IMF, 2004). Short-term local debt was exchanged for a new local bond issued under Argentinean law maturing in 2006 and featuring six semi-annual amortization bullets (to be paid at the end of its life), the capitalization of
interests in the first two years, and an interest rate linked to local rates thereafter (Sturzenegger and Zettelmeyer, 2007).

The mega-swap reduced payment obligations from 2001 to 2005, as maturity was extended from one to eight years. However, payment obligations after 2006 increased substantially as the stock of the debt increased by US$ 907 million in face value, the face value of assets involved was left unchanged, no grace period was introduced and coupon rates were increased from 2 percent to 13 percent. Net present value (NPV) losses for investors were small, ranging from -19.94 to 9.75 percent, depending on the discount rate used.

The IMF (2003b) reports that of the US$ 29.49 billion of exchanged debt, US$ 12.17 billion was domestic debt (US$ 10.49 billion in foreign currency and US$ 1.68 billion in local currency), and US$ 17.32 billion was external debt (US$ 16.84 billion in foreign currency and US$ 480 million in local currency). Domestic financial institutions held most of the exchanged debt instruments, and the participation rate was 50 percent.

On October 28, the government announced a “voluntary” two-phase bond exchange program (IMF, 2003b). The first phase (Phase I) was completed on December 13 and offered “guaranteed” loans governed by Argentinean law to local holders in exchange for their bonds. While these new loans matched the face value

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20 Own computations based on the IMF (2004). According to the IMF (2004), the (weighted) maturity of bonds was extended by 3.73 years (including both external and domestic) and the (weighted) coupon for the whole operation (external and domestic) raised by 1.11 percent.

21 Own computations based on the IMF (2004). According to the IMF (2006), the NPV losses were from -2 and -28 percent.

22 According to the IMF (2006), this amounted to 11 percent of GDP.

23 The participation rate refers to the entire operation, but since we do not have any additional information, we assume that the participation rate was similar for domestic and external debt (IMF, 2002).
of the exchanged bonds, they lowered interest payments and extended maturities. The second phase (Phase 2) was intended to target non-residents but was never been implemented due to the December 2001 default.

Three options were offered to creditors in the first phase (IMF, 2003b, 2006):

1) An instrument with a fixed interest rate (30 percent lower than the original and capped at 7 percent), a maturity extension (three years for shorter-term instruments maturing in 2011), and a 17–month grace period for interest payments lasting through April 2002.

2) An instrument with similar conditions but a floating interest rate (capped at LIBOR plus 300 basis points).

3) A capitalizing loan maturing in 2011 (Sturzenegger and Zettlemeyer, 2005). U.S. dollar and Argentine peso bonds were eligible for this option. Bonds in European currencies and yen were not (IMF, 2002).

Exchanged bonds amounted to US$ 58.52 billion (19 percent of GDP). Of the US$ 14.66 billion in domestic debt involved, US$ 13.53 billion was denominated in foreign currency.24 Of the US$ 33.71 billion in external debt involved, US$ 33.52 billion was in foreign currency. As a result of the exchange, US$ 42 billion in federal bonds, mainly held by domestic banks and pension funds, were exchanged for loans (which were pesoized in March 2002) with lower interest rates and longer maturities. In turn, US$ 16 billion in provincial peso- and U.S. dollar-denominated debt was exchanged for new long-term peso-denominated federal government bonds (IMF, 2003a). The exchange program implemented through Phase 1 reduced interest payments by US$ 2.35 billion and amortizations by US$ 2.5 billion in 2002. Financing needs fell by US$ 26.2 billion in the first five years. The overall participation rate was 65 percent, and NPV losses ranged from 16.7 to 74.1 percent (Sturzenegger and Zettlemeyer, 2005).

The implementation of Phase I triggered a bank run.25 In response, the government froze sight deposits on December 3, 2001, and time deposits on January 3, 2002 (corallon). Withdrawal restrictions had already been imposed on December 1, 2001, through the so-called corralito.26 In 2001, private-sector deposits amounted to Arg$ 59.68 billion (US$ 42.63 billion), of which 74 percent were denominated in foreign currency (IMF, 2003a).27 Through Executive Order 214/2002, deposits were rescheduled according to their currency of denomination.28 Deposits in foreign currencies were converted into pesos at a rate of 1.4 pesos per U.S. dollar.

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24 If restructured bonds are excluded, the amount would be U.S. $ 48.37 billion. This figure is computed using the Sturzenegger and Zettlemeyer (2005) dataset. According to this source, the total exchanged was U.S. $ 41.7 billion, and therefore we consider the difference as the holdouts.

25 In 2001, the total deposit outflow is estimated to have reached $20 billion (Jonas, 2002).

26 The weekly limit of Arg$250 on withdrawals from individual accounts was raised to Arg$1500 per month on January 3, 2002 (Executive Order 1570/2001, IMF, 2003b). Exclusions were established with Executive Order 1606/2001. As of September 2001, there were public owned banks in Argentina, which were deposits holders (Schuler, 2002; De la Torre Yeyati, and Schmukler, 2003; Barajas and others, 2006).

27 U.S. dollars amounts are computed using the January 2002 exchange rate of 1.4Arg/$.

28 Deposits denominated in peso and foreign currencies were rescheduled differently. Also, their interest rates differed (7 percent for peso deposits, set by the central bank for foreign currency deposits). Pension Funds’ Administrators peso deposits were excluded (Giglio, 2003).
which was below the prevailing market rate, and could be swapped into U.S. dollar-denominated bonds. 29
These swaps amounted to US$ 8.75 billion and were implemented using the following options (Garrigasait, 2012):

- U.S.$ 4.36 billion of dollar-denominated BODEN 2012, issued on August 3, 2002, with a 10.5-year maturity and paying a 2.1 percent coupon (interest payable every six months). 30
- U.S.$ 3.5 billion of peso-denominated BODEN 2007, issued on February 3, 2002, with a five-year maturity and paying a 2 percent coupon plus the reference stabilization coefficient (CER) set by the central bank every six months.
- U.S.$ 885 million dollar-denominated BODEN 2005, issued on February 3, 2002, with a 3.3-year maturity and paying the six-month LIBOR.

Deposits swapped from local currency denomination to U.S. dollar denomination could be converted to either BODEN 2012 or BODEN 2007, whereas deposits denominated in pesos were converted to BODEN 2007. BODEN 2005 securities were exchanged for deposits originally defined in foreign currency and lower than 10,000 pesos (converted at par), or for deposits denominated in any currency that qualified for certain “exceptions” (converted at 1.4 pesos per dollar) (El Pais, 2002; Mairal, 2002). Those who did not wish to participate in the exchange received peso-denominated certificates of rescheduled deposits (CEDROs), paying 2 percent interest. 31 At a later stage, holders of CEDROs, which were originally denominated in foreign currency, were permitted to exchange them for 10-year dollar-denominated BODENS LIBOR 2013 securities or peso-denominated fixed-term bills. 32 The former eventually covered US$ 1.94 billion in exchanged CEDROs.

The corralito (one-year deposit freeze) was lifted on December 2, 2002, whereas the corallon was lifted gradually in 2003. 33 Under Executive Order 739/2003, holders of peso-denominated rescheduled CEDROs received U.S. dollar-denominated BODENS 2013 securities to compensate for the difference between applied and actual exchange rates (Arg$1.4 to U.S.$1 versus Arg$2.98 to U.S.$1) (Giglio, 2003). According to the IMF (2002), NPV losses ranged from 25 to 39 percent.

On December 23, 2001, newly elected President Eduardo Duhalde announced the government would default on its debt, and in January he announced the end of the convertibility regime and the introduction of a dual exchange regime. 34 Argentina’s debt burden, denominated mostly in U.S. dollars, surged following the devaluation. As a result, the government decided (Executive Order 214/2002 on February 4, 2002) to pesoify

29 In the exchange, the Coeficiente de Estabilizacion de Referencia (CER) was considered (Giglio, 2003; Moody’s, 2008). The government also announced the easing of restrictions on frozen time deposits of up to Arg$7,000 (IMF, 2003a).
30 An additional U.S. $5.23 billion of Boden 2012 were sold to Venezuela, which offered help to Argentina (Reuters, 2012).
31 CEDROs corresponding to deposits denominated in pesos offered a 7 percent interest rate instead (Giglio, 2007; Spector, 2008; Decreto 905/2002; and Decreto 1836/2002).
32 See Decree 1836/2002. Holders of CEDROs with amount lower than Arg$7000 could cancel these certificates in cash (Garrigasait, 2012).
33 See Resolution 668/2002 and Sturzenegger and Zettelmeyer (2007). The cor rallon was lifted with the Decree 739/2003 on March 2003.
34 See Law No.25,820 (the so-called “Emergency Law”) and IMF (2003a).
the guaranteed loans issued under Phase I and any other U.S. dollar-denominated domestic law instruments (Sturzenegger and Zettlemeyer, 2005; IMF, 2003b; Spector, 2008). Pesoified debt amounted to US$ 58 billion, with residents holding US$ 14.66 billion.\textsuperscript{35}

The pesoization of banks’ balance sheets was asymmetric, as deposits were converted at an exchange rate of 1.4 pesos per U.S dollar, while loans were converted at par plus the “coeficiente de variación salarial”\textsuperscript{36}. A market conversion rate of 1.9 pesos per U.S dollar meant pesoization yielded substantial losses for banks. Interest rates for the new instruments were set in a range from 2 to 7 percent against an original fixed-rate interest ranging from 2.8 to 12.1 percent.\textsuperscript{37} Maturities and face values were left unchanged. The participation rate for the pesoization operation was 65 percent, and the NPV losses ranged from 28 to 88.7 percent.\textsuperscript{38}

Finally, banks received US$ 9 billion in compensation bonds (Bodens, 2012) from the government as a compensation for the asymmetric pesoification.\textsuperscript{39} The pesoization enabled investors to revert to the defaulted foreign currency bonds they had exchanged during Phase I. About US$ 3.65 billion of pesoified loans were reconvered accordingly. Meanwhile, creditors holding US$ 16.3 billion in pesoified loans, mostly pension funds, held out and were “re-dollarized” (by decree) in August 2003.\textsuperscript{40}

Despite the restructuring, the government still needed to ease its debt burden. To restructure the external debt and part of the already restructured domestic debt, in September 2003, authorities launched the so-called “Dubai terms,” offering a 75 percent nominal haircut on defaulted securities with no recognition of past-due interest payments. Investors, facing a 90 percent loss in NPV, pushed back against these terms. Authorities later softened their stance by offering a “menu” of options and partially recognized past-due interest under the “Buenos Aires proposal,” presented on June 1, 2004, and published on November 1, 2004. Simultaneously, the Argentine Congress passed the “Lock Law” (“Ley Cerrojo”) to prevent the reopening of the exchange procedure and to suspend future payments to bondholders that did not accept the offer. The new exchange, which was dubbed the “International Global debt exchange”, took place from January 12 to February 25, 2005. Bondholders were given three options:

\begin{itemize}
  \item U.S.$14.66 billion was the amount coming from the Mega-swap (Sturzenegger and Zettlemeyer, 2005).
  \item Garrigasait (2012); Barajas and others (2006). The CER was applied to the amounts converted in pesos. Exceptions to this conversion were specified in the Executive Orders 410/2002 and 704/2002, which excluded the following assets from the conversion: all foreign currency-denominated debt held by individuals or entities located in foreign countries, payable to local creditors with funds obtained abroad even if these obligations were subject to Argentine law (Giglio, 2003).
  \item Most instruments featured interest rates equal to 2 percent. Only instruments with very long maturities and guaranteed loans featured interest rates higher than 2 percent (Sturzenegger and Zettelmeyer, 2007).
  \item The NPV loss for the whole operation was between 30 and 60 percent (Sturzenegger and Zettlemeyer, 2005).
  \item Other sources report a different amount for the issuance of compensation bonds: U.S. $7.85 billion (Garrigasait, 2012) and U.S. $10.42 billion (de la Torre et al., 2003). Successive decrees and norms enabled depositors to obtain government bonds for the difference between the official and the free exchange rate (Sturzenegger and Zettelmeyer, 2007; Spector, 2008; Garrigasait, 2012).
  \item Another debt exchange occurred in October 2002 when Decreto 1579/2002 established a swap for intergovernmental debt holding to replace existing provincial debt (Titulos Publicos, Bonos, Letras del Tesoro o Prestamos) with 10-year peso-denominated Bonos Garantizados paying 2 percent. Since this swap involves intergovernmental debt, we do not report this in the dataset.
\end{itemize}
1) A *par bond* with no face value reduction, low but increasing coupons (0.63 percent initially to a final 2.48 percent for peso bonds, 1.33 to 5.25 percent for U.S. dollar bonds, and 1.20 to 4.74 percent for euro bonds), and a 35-year maturity.

2) A *quasi-par bond*, which exchanged old bonds, and consumer-price indexed Argentine peso bonds, with a 30.1 percent nominal cut due to pesoization, 3.31 percent coupons, and a 42-year maturity.

3) A *discount bond* with a 66.3 percent face value reduction, an increasing coupon (3.97 percent initially to a final 8.28 percent for U.S. dollar bonds, 3.75 to 7.82 percent for euro bonds, and a fixed 2.79 percent for peso bonds), and a 30-year maturity (Sturzenegger and Zettelmeyer, 2007).


The International Global debt exchange issued US$ 35.3 billion of debt: US$ 15 billion in par bonds, US$ 11.9 billion in discount bonds, and Arg$24.3 billion (US$ 8.3 billion) in quasi par bonds. It also helped simplifying the structure of Argentine debt by reducing the number of bond series (152 to 11), laws governing bonds (8 to 4), and bond currency denominations (6 to 4) (Diaz-Cassou, Erce, and Vazquez-Zamora, 2008). Existing debt securities denominated in U.S. dollars, euros, or yen could be exchanged for new debt securities denominated in the original currency, U.S. dollars, or indexed pesos. Other international currency debt could be exchanged for debt in pesos, U.S. dollars, or euros. Meanwhile, owners of peso bonds could not alter their currency denominations (Sturzenegger and Zettelmeyer, 2007). The NPV loss ranged from 55.53 to 76.81 percent, and the participation rate was 96 percent (Moody’s, 2013).42

Thanks to the exchange, Argentina’s debt-to-GDP ratio fell from 148 percent in December 2002 to 72 percent in April 2005. That said, this figure does not consider post-restructuring arrears worth approximately US$ 20 billion in July 2005 stemming from holdout bondholders.

In April 2010, authorities launched a second bond exchange with the same terms as the 2005 restructuring, which eventually covered US$ 13.1 billion of the U.S.$18.3 billion that held out during the first exchange. The cumulative participation rate rose to 92.4 percent. In March 2016, Argentina and its last holdout creditors

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41 The operation also involved U.S. $1.7 billion of bank loans (Ministerio de Economía y Producción, 2003), for which we have no information on the restructuring terms.

42 NPV loss is computed combining haircuts from Sturzenegger and Zettelmeyer dataset with the list of restructured bonds coming from Republic of Argentina (2004). The NPV loss for the total (external and domestic) ranged from 64 to 82 percent (Sturzenegger and Zettelmeyer, 2005).
settled for US$ 4.85 billion. One month later, Argentina returned to international capital markets after 15 years (Lopez Santi, 2018).
References


Barbados (2018)

Framing the crisis

Following years of loose fiscal policies and large external imbalances, in 2017 the government introduced austerity measures to reduce its fiscal deficit and debt. These measures triggered a slowdown, which pushed GDP growth down from 2.3 percent in 2016 to -0.5 percent in 2018 (PDM Network, 2018).

When the newly appointed government took office in May 2018, it was left with depleted foreign exchange reserves (US$ 220 million) and an unsustainable fiscal position (United States Department of the Treasury, 2018; Troubled Company Reporter Latin America, 2018). The lack of access to global capital markets from 2013 and limited domestic demand for government debt predestined public-sector entities as the main financing source, which included the central bank (Barbados Today, 2018). Public debt reached 157 percent of GDP by 2018, of which the largest component consisted of domestic debt at 109 percent of GDP (United States Department of the Treasury, 2018).

On June 1, 2018, the government announced its intention to stop servicing U.S. dollar debt, and to restructure both domestic and external debt comprehensively (Central Bank of Barbados, 2018).43 Only bilateral external debt and debt held by multilaterals were excluded from the restructuring (IMF, 2019). The restructuring, carried out under the umbrella of a four-year Extended Fund Facility, formed a critical component of the Barbados Economic Reform and Transformation Plan (BERT). The aim was to limit foreign reserve outflows, reduce financing needs, and put debt on a sustainable path (Central Bank of Barbados, 2018; United States Department of the Treasury, 2018). After a first rejection of the government proposal to restructure external debt, authorities reached an agreement with creditors on October 18, 2019 (Government Information Service, 2019; Latin Finance, 2019).

Details of domestic debt restructuring

On September 7, 2018, the government launched a debt exchange program for Barbadian dollar-denominated debt (Government of Barbados, 2018a; Ministry of Finance, Economic Affairs and Investment, 2018a). To provide an incentive to participate, the government stated that untendered instruments would remain indefinitely in default (Government of Barbados, 2018b). As a result, the exchange program included: commercial banks, general and life insurers, the National Insurance Scheme (NIS), the central bank, firms, and almost all Barbadians. This pushed the participation rate above the threshold established under the

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43 White Oak Advisory Ltd was appointed as financial advisor (Caribbean News Now, 2018). Payments on U.S. dollar-denominated debt were suspended given the very low level of international reserves, whereas Barbados kept paying interest on domestic debt until launching the exchange offer. The government defined external debt as debt denominated in currencies other than the Barbados dollar, irrespective of the residency of the creditor (Anthony, Impavido, and van Selm, 2020; Government of Barbados, 2018b).
Collective Action Clauses (CACs), which the government had introduced retroactively on September 25, 2018. A first exchange operation was closed on November 19, 2018 (IMF, 2018).

As the CAC threshold was met, US$ 6 billion (approximately B$12 billion) of debt was exchanged, corresponding to 100 percent of the eligible total (Ministry of Finance, Economic Affairs and Investment, 2019d). The exchange included all Barbadian dollar-denominated debt securities or instruments the government issued, loans and bonds state-owned enterprises (SOEs) contracted, and entities that received transfers from the public budget. These securities included all Treasury bills, Treasury notes, and any debentures. Saving bonds were excluded from the restructuring (Government Information Service, 2018; Government of Barbados, 2018a, 2018b). Domestic banks held 19 percent of the restructured debt, the central bank 22.85 percent, and the NIS 31.36 percent (IMF, 2019, Anthony, Impavido, and van Selm, 2020). The debt exchange also cleared B$865 (US$ 432.5) million of public-sector arrears (8 percent of GDP), half of which was with private companies. Most arrears accumulated under the new government were included in the exchange (Ministry of Finance, Economic Affairs and Investment, 2018a).

The new instruments included a “natural disaster” clause (NDC), which allowed the government to capitalize interests and defer amortizations falling due in the two-year period after a catastrophic weather event. The following instruments were offered in exchange:

1. Eleven Series A amortizing strips with maturities ranging from 5 to 15 years and quarterly interest payments beginning on December 31, 2018, with the following annual interest rate path: 1.0 percent for the first three years, 2.5 percent for the fourth year, and 3.75 percent thereafter. Accrued interests were to be capitalized through September 30, 2018 and added to the principal. The principal was scheduled to be paid in equal quarterly instalments starting December 31, 2019. Instruments included the NDC.

2. Liquidity Reserve Fund Treasury Bills (LRF T-bills) with a 90-day maturity, paying 0.5 percent annually for 10 years and market rates thereafter. These instruments did not include the NDC.

3. Eleven Series B amortizing strips with maturities ranging from 5 to 15 years and quarterly interest payments beginning on December 31, 2018, with the following interest rate path: 1.0 percent for the

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44 The Parliament approved a legislation according to which all instruments classified as “Affected Debt” in the exchange offer were converted into a single asset class for voting purposes (Ministry of Finance, Economic Affairs and Investment, 2018a; Government of Barbados, 2018b).

45 Before presenting the restructuring offer, the Barbadian financial-sector supervisors conducted a stress test to evaluate the effects of the proposed debt restructuring on banks to ensure that it would not jeopardize financial stability (Anthony, Impavido, and van Selm, 2020).

46 Due to significant monetary financing, the central bank held a large stock of Treasury bills. Commercial banks also mainly held Treasury bills owing to obligations related to statutory minimum requirements for government holdings (Anthony, Impavido, and van Selm, 2020).

47 We consider the agreement date on the IMF program as the starting date for the arrears accumulation (September 2018).

48 A payment to the government larger than U.S. $5 million under Barbados's catastrophe insurance policy with the Caribbean Catastrophe Risk Insurance Facility was set as a trigger for activating the clause (Central Bank of Barbados, 2018; Government Information Service, 2019).
first three years, 2.5 percent for the fourth, and 3.75 percent thereafter. Accrued interest was to be capitalized through September 30, 2018 and added to the principal. The principal of each strip was to be paid in four equal quarterly instalments one year before maturity. Instruments included the NDC.

4. Eleven Series C amortizing strips with the same conditions as the 11 Series B amortizing strips described above. This instrument did not include the NDC.

5. Twenty Series D amortizing strips with maturities ranging from 16 to 35 years and interest payments beginning November 30, 2018, with the following interest rate path: 1.5 percent for the first 5 years, 4.25 percent for years 6 through 10, 6.0 percent for years 11 through 15, and 7.5 percent thereafter. The principal was to be paid in four equal quarterly instalments in the year prior to maturity, with the exception of the principal for the final strip, which was to be repaid in three instalments. Instruments included the NDC.

6. Series E amortizing bond with a 25-year maturity, a five-year grace period on principal repayments, and the following annual interest rate path: 4 percent for the first three years and 8 percent thereafter. Payments were to occur monthly in the first five years, followed by level payments of principal and interest thereafter. This instrument was issued at a discount of 37.5 percent of face value. It also included the NDC.

7. Series F bond with a four-year maturity and a six-month grace period followed by 42 equal monthly principal repayments at no interest rate. This instrument included the NDC.

8. Series G amortizing bond with a 50-year maturity, a 15-year grace period on principal repayments, and the following annual interest rate path: 4.0 percent for the first 15 years, 6.0 percent for years 16 through 20, 7.5 percent for years 21 through 25, and 8.0 percent thereafter. Quarterly payments were to begin October 31, 2023, with 100 percent interest capitalization for the first five years. This instrument included the NDC (Government of Barbados, 2018a).

The government sought inter-creditor equity, with all creditors receiving comparable terms in the exchange offer (Ministry of Finance, Economic Affairs and Investment, 2018c). Table 1 clarifies how the different instruments were allocated across investors. While private creditors’ claims were restructured through extending the maturity and reducing the interest rate, public creditors’ claims were restructured through a combination of reducing face value, extending maturity, and reducing the interest rate (IMF, 2019). The NIS and central bank debt received different terms (Ministry of Finance, Economic Affairs and Investment, 2018b). Eighty-five percent of banks’ claims were exchanged into Series B, while the remaining 15 percent were

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49 Level payment refers to the repayment of a loan through a fixed number of fixed-amount monthly instalments.
50 Claims of individuals below B$50,000 were repaid in cash (IMF, 2019).
51 Group 1 included charities, churches, cooperatives, credit unions, and nonfinancial and trust companies. Group 2 included nonbank institutions, insurers, or classified under Other Institutions Group 1. Group 1 of arrears referred to arrears the government and SOEs owed to the NIS. Group 2 referred to arrears larger or equal to U.S. $500,000 the government owed and SOEs owed to private entities, including VAT rebates. / Group 3 referred to non-VAT arrears owed to the University of the West Indies (Government of Barbados, 2018a).
converted into the LRF T-bills to provide a short-term instrument useful for liquidity management purposes. In exchange for its claims, the central bank received a portfolio of equally weighted tradable benchmark Treasury notes and debentures with a 5-to-25-year maturity and three-month T-bills. The NIS’s short- and long-term claims were treated differently. While holdings of Treasury bills were converted into Series B, the long-term claims were exchanged for Series E. General insurers received different treatment compared to life insurers. General insurers received instruments with and without an NDC in exchange for their claims, while all the instruments life insurers received contained the NDC. A special agreement was reached with Sagicor, the largest insurer at the time (Anthony, Impavido, and van Selm, 2020). Most arrears were resolved using Series D.\(^5\)

Table 2: Allocation of instruments across investors

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<th>Pensioners</th>
<th>Other individuals</th>
<th>Banks</th>
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<th>General insurers</th>
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<th>Other inst. (group 2)</th>
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Interest rates were reduced significantly, and the maturity was extended from 4 years to 15 years (Government of Barbados 2018b, 2019). Instruments with maturities ranging from a few weeks to 20 years were exchanged for new instruments with maturities ranging from 15 to 50 years. All new instruments featured amortizing structures rather than bullets to reduce the debt stock gradually (Ministry of Finance, Economic Affairs and Investment, 2018b). The debt restructuring entailed reducing debt upfront to 30 percentage points of GDP through combining face value reductions and lifting guarantees on SOE debt (IMF, 19-182 pp. 37). The new instruments generated losses for all bondholders. Using a 7 percent discount rate, NPV losses for domestic creditors amounted to 30 percent for private creditors and 55 percent for public creditors (IMF, 2019).\(^5\)

In addition to distinguishing between individuals and institutions, the exchange divided individuals into two categories: “pensioners” and “other individuals”. Principal repayments for pensioners started on December 31, 52 The government’s overdraft at the central bank was written off (IMF, 2019).

53 After implementing the debt exchange, delays occurred in making the interest payments due on December 31. These delays were related to changes that had to be implemented to the computerized system because of the new structure of government securities. All the payments had then been settled by January 11 (Central Bank of Barbados, 2019; Barbados Today, 2019a).

54 The issuance of short-term Treasury bills was limited.

55 The central bank suffered the largest NPV loss of around 76 percent (IMF, 2019).
2019. Principal payments for “other individuals’ was set to start one year before the maturity date of each strip. In addition, interest payments to pensioners were exempted from withholding taxes.56

After implementing the debt exchange, an additional B$550 million (US$ 275) on arrears (5 percent of GDP) were cleared by applying the same terms offered to arrears under the debt exchange. All in all, from the approval of the IMF program, the government had cleared almost half of its domestic expenditure arrears (roughly 11 percent of GDP in October 2018) and intended to clear the remaining sum in the medium term (Ministry of Finance, Economic Affairs and Investment, 2019d; United States Department of the Treasury, 2018).

On October 18, 2019, the government reached an agreement with creditors to implement the second leg of the restructuring process, involving both domestic- and foreign-law debt denominated in U.S. dollars. The exchange offer, launched on November 5, remained open until November 22 (Ministry of Finance, Economic Affairs and Investment, 2019a, 2019b, 2019c).57 Affected domestic law debt comprised three instruments: a bond issued by the government with a 7.8 percent coupon maturing in 2019, and two bonds issued by SOEs, which amounted to around US$ 76 million (Ministry of Finance, Economic Affairs and Investment, 2019b).58 Affected external debt comprised three Eurobonds and a Credit Suisse loan facility. Outstanding Eurobonds, which amounted to US$ 540 million, featured interest rates from 6.5 to 8 percent and matured in 2021, 2022, and 2035.59 The Credit Suisse loan facility amounted to US$ 96.25 million (out of the U.S.$225 million available), and featured a five-year maturity, which was extended by one year in 2016 (Anthony, Impavido, and van Selm, 2020; Ministry of Finance, Economic Affairs and Investment, 2019a, 2019b).60 The related coupon rate was linked to Barbados’s credit rating and had therefore increased, peaking at 12 percent at end-2017.

All eligible debt, mainly held by foreign creditors, was exchanged for new amortizing bonds featuring a 10-year maturity, a five-year grace period on principal repayments, and a 6.5 percent coupon (Barbados Today, 2019b). Additionally, the agreement featured a US$ 40 million repayment from 2019 to 2021 (US$ 7.5 million in cash and US$ 32.5 million in short-term amortizing bonds maturing in 2021 with a 6.5 percent coupon).61 The agreement included a 26.3 percent face value reduction, computed by aggregating original principal amounts and past due and accrued interest as of October 1, 2019. The NDC was also included in these new bonds.

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56 Pensioners were defined as individuals of pensionable age, residents of Barbados, and receiving pension benefits. Other individuals were defined as those not of pensionable age or o pensionable age but receiving no pension benefits (Government of Barbados, 2018a).

57 As part of the bond exchange offer, Barbados solicited consent from holders of the eligible debt for an extraordinary resolution, which was approved with a large majority (Ministry of Finance, Economic Affairs and Investment, 2019a; Government Information Service, 2019b).


59 The Eurobonds comprised 7.25 percent notes due in 2021 amounting to U.S.$150 million, 7 percent notes due in 2022 amounting to U.S.$200 million, and 6.625 percent notes due in 2035 amounting to U.S.$190 million (Ministry of Finance, Economic Affairs and Investment, 2019a).

60 Originally, the loan amounted to U.S. $150 million but was increased in 2014 (Anthony, Impavido, and van Selm, 2020).

61 These short-term bonds featured a U.S. $30 million amortization in 2020 (IHS Markit, 2019).
In addition, parties included a clause reinstating debt relief provided when a default payment occurs before the successful completion of the IMF program. NPV losses for creditors were estimated at 44 percent by using a 12 percent discount rate (Anthony, Impavido, and van Selm, 2020).

On November 29, 2019, the government announced the debt exchange secured a 100 percent participation rate (Anthony, Impavido, and van Selm, 2020, pp. 10–11; Ministry of Finance, Economic Affairs and Investment, 2019b).

On February 10, 2020, the government launched a consent solicitation to amend their terms related to some bonds issued under domestic law. The solicitation encompassed a US$ 6.43 million floating rate U.S. dollar-denominated bond issued from 2009 to 2019, US$ 0.7 million fixed-rate dual currency non-callable sovereign guaranteed bonds issued by Barbados Agricultural Management Co. Ltd., and US$ 19 million fixed-rate non-callable guaranteed bonds from 2007 to 2022 issued by Barbados Investment and Development Corporation. The proposed amendments were approved by 100 percent of the votes cast and became effective on March 3, 2020. The amendments featured a 25 percent reduction of the principal, a 35 percent reduction of accrued and unpaid interest (as of October 1, 2019) and the capitalization of the remaining part, a reduction of the coupon rate to 6.5 percent, and the addition of the NDC (Ministry of Finance, Economic Affairs and Investment, 2020a, 2020b).

Differentiated thresholds were used for triggering the NDC depending on the type of natural disaster. However, holders of at least 50 percent of the aggregate principal amount of the outstanding bonds can block the activation of the clause (Anthony, Impavido, and van Selm, 2020).

In September 2018, the original proposals the creditors and the government advanced featured an extensive gap in NPV terms (29 percent according to the creditors’ proposal and 59 percent according to the government’s proposal).

CACs were used on the Eurobonds (Anthony, Impavido, and van Selm, 2020; Ministry of Finance, Economic Affairs and Investment, 2019b).

The government and Barbados Agricultural Management Co. Ltd received consent from holders representing 100 percent of the outstanding bonds. The bonds issued by Barbados Investment and Development Corporation received consent from holders of 84.47 percent of the outstanding bonds (Ministry of Finance, Economic Affairs and Investment, 2020a).
References


Bolivia (1982)

Framing the crisis

From 1977, the fiscal deficit started widening as the Bolivian government borrowed increasingly from abroad amid a persistent economic slowdown (Morales, 1986, 1988). The economic slowdown turned into a crisis in 1982 when GDP contracted. As the government lost access to capital markets, printing money ended up being the main source of funding the deficit (Morales, 1986, 1988; Kehoe and Machicado, 2014). Meanwhile, a significant portion of the reserves were depleted in the attempt to seize the devaluation of the peso (Banco Central de Bolivia, 1982).

In November 1982, the government revoked the ability of residents to hold foreign-currency deposits (FCDs) with the domestic banking system and, with the Decreto Supremo No. 19249, FCDs were forcibly converted into local currency. Simultaneously, it also devaluated the peso and adopted a fixed-exchange regime with the U.S. dollar (Kehoe and Machicado, 2014).

Details on domestic debt restructuring

On November 3, 1982, the government froze US$ 128 million in dollar-denominated deposits, which represented 90 percent of all deposits (Armas, Levy Yeyati, and Ize, 2006; Hudson and Hanratty, 1991; Mas, 1995). Frozen deposits were then converted to local currency at the official market rate of 145.4 B$/US$, well below the prevailing market rate. Two days later, the official exchange rate was devalued to 200 B$/US$, incurring a capital loss of 27 percent. Capital losses increased to 35 percent when they are computed using the non-official parallel rate, which averaged at 225B$/US$ (Mas, 1995).

With Resolucion No. 306/82 of November 15, 1982, deposit rates were also amended. Rates were raised from 22 percent to 30 percent for saving deposits, and from 23 percent to 32 percent for time deposits denominated in local currency. Deposit rates for time deposits originally denominated in U.S dollars and later converted to local currency were increased from 23 percent to 25 percent.

Following a three-year ban, Bolivia reintroduced FCDs to its financial system in 1985, which induced a rapid re-dollarization of the financial system (Savastano, 1992; IMF, 2003).

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66 Domestic holdings of FCDs had been highly incentivized from October 1973 with the aim of increasing capital inflows (IMF, 2003).

67 According to Antelo (1996), the government decided to de-dollarize the economy to (1) give the government control back over the money supply and to concentrate the stock of U.S dollars for the external debt repayments, (2) restore the government’s ability to raise funds through inflation, (3) support sectors burdened by U.S dollar debts, and (4) lower investment costs in the industry/industries whose U.S. dollar-denominated debts depreciated with inflation.

68 At the time, the financial sector also included state banks, such as BAB, Bamin, and Banco del Estado-Banest (Hudson and Hanratty, 1991; Eguino, 2016).

69 An earlier change in interest rates occurred on March 23, 1982, when saving deposits and time deposits denominated in local currency changed from 22 percent to 30 percent (as minimum), whereas interest rates for foreign currency denominated deposits changed from 20 percent to LIBOR (as minimum). On August 3, 1982, interest rates for Banco de la Vivienda increased from 14 percent to 24 percent (Banco Central de Bolivia, 1982).
References


Bosnia and Herzegovina (1992)

Framing the crisis

Residents of the Socialist Federal Republic of Yugoslavia (SFRY) could hold their savings with domestic banks in the form of foreign currency-denominated deposits. Such deposits paid high interest rates and featured an explicit public guarantee (ECHR, 2010), and the central bank of the SFRY held the counterpart assets to these deposits in Belgrade, at (IMF, 2004a). 70 With the dissolution of the SFRY, the central bank of Yugoslavia seized the deposits in April 1991. Simultaneously, state banks stopped servicing their external obligations (IMF, 1998).

Following the secession from the SFRY in March 1992, Bosnia and Herzegovina (BiH) took over the liabilities that arose from foreign currency deposits, which the central bank of the SFRY had originally guaranteed (Central Bank of Bosnia and Herzegovina, 2005; Skreb and Kraft, 2002; World Bank, 1997). 71 In March 1992, the government of the BiH froze foreign currency deposits due to the lack of counterpart assets, which had remained on the central bank of the SFRY’s balance sheet (Skreb and Kraft, 2002; World Bank, 1999; IMF 2000, 2005a). 72 In April 1992, a civil war broke out, shattering the economy and Bosnian human and physical resources. Authorities estimated war damages of between US$ 50 billion and US$ 70 billion, and the destruction of productive capacity of between US$ 15 billion and US$ 20 billion. Apart from physical destruction, these estimates also include the capitalized value of unpaid domestic claims accumulated since its independence (Skreb and Kraft, 2002; World Bank, 1997). The civil conflict ceased with the Dayton General Framework Agreement on Peace (GFAP) signed in December 1995 (Nedic, 2006; European Commission, 2003). The Dayton Treaty provided the BiH with a new constitution, which transformed the country into a decentralized state consisting of two entities: the Republika Srpska – RS – and the Federation of BiH – FBH – (Skreb and Kraft, 2002). A new self-governing administrative unit, the Brčko District, was introduced in 1999.

Details of domestic debt restructuring

Right after the end of the war, the subnational entities completed a verification process to confirm the amount of unpaid domestic claims, which included frozen foreign currency deposits, bank loans, wage and pension arrears, and war-related claims. Frozen foreign currency deposits amounted to around DM 4.2 billion (US$ 2.69 billion), of which DM 3 billion referred to depositors in the FBH and DM 1.2 billion to depositors in the

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70 Foreign currency deposits were subject to nearly 100 percent reserve requirements at the Central Bank of the SFRY (World Bank, 1999).

71 See section 6 of the SFRY Legislation Application Act 199211.

72 There were state-owned banks in the BiH, as all commercial banks based in the BiH were nationalized (ECHR, 2010; IMF, 1998; Reuters 1998, 1999; World Bank, 1997, 1999).

In the context of a privatization program, the first clearing strategy was implemented in 1998 when both entities issued vouchers to citizens in exchange for their claims on the government (IMF, 2000). In total, vouchers amounting to some KM 15 billion (US$ 8.98 billion or 150 percent of 2000 GDP) were issued during the lifespan of the program, with the specific amounts subject to set parameters (World Bank, 1997; IMF, 2005a). Vouchers could be used at face value to purchase government-owned assets. Together with the voucher approach, there was also a cash payment approach (World Bank, 1999). The possibility of using frozen deposits as a means of payment only led to a small reduction in unpaid domestic claims. The stock of frozen foreign currency deposits declined KM 0.3 billion from 1998 to 2003, with more than KM 2.2 billion (US$ 1.33 billion) still outstanding at the end of the period. This outstanding amount only accounted for a small fraction of total unpaid domestic claims, still uncertain as of 2003 due to delays in the auditing process (European Commission, 2003).

In December 2003, the BiH announced a plan to restructure KM 4.72 billion (US$ 2.97 billion) of unpaid domestic claims. The KM 2.96 billion of claims on the FBH included KM 942 million of arrears, KM 1.11 billion of frozen foreign currency deposits, KM 900 million of war-related claims, and KM 11 million of commercial bank loans. The KM 1.76 billion of claims on the RS included KM 387 million of arrears, KM 775 million of frozen foreign currency deposits, and KM 600 million of war damage claims. Additionally, the plan involved KM 85 million (US$ 5.34 million) of frozen foreign currency arrears of the Brčko District (IMF, 2004a, 2004b, 2005b).

The plan approved in 2004 envisaged NPV losses ranging from 55 to 94 percent (IMF, 2004a; Reuters, 2004). In line with the plan, claims were to be settled through cash payments (4 percent of GDP) and bonds (6 percent of GDP) featuring 20 to 50-year maturities, a 10 to 40-year grace period, and an interest rate between

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73 U.S. dollar amounts are computed using an exchange rate of DM 1.56 per U.S. dollar in 1992.
74 We consider the default date on bank loans as the same time when the FBH seized foreign currency deposits.
75 See the Law on Opening Balance Sheet of Enterprises and Banks and Entity Laws on privatizations (Official Gazette 12/98). In particular, the Law determined which assets and liabilities were removed from state-owned banks’ balance sheets during their privatization. Removable items included the frozen foreign currency deposits redeposited with the former National Bank of Yugoslavia, along with other banks’ liabilities toward households. The Ministries of Finance took over these assets and liabilities, after write-offs (World Bank, 1999).
76 U.S. dollar amounts are computed using an exchange rate of KM 1.67 per U.S. dollar.
77 In the FBH, vouchers were used to settle claims related to frozen foreign currency deposits, unpaid wages and pensions, and restitution claims. In the RS, vouchers settled claims related to frozen foreign currency deposits, and to compensate veterans and families of fallen soldiers. The RS planned to settle restitution claims by establishing a special fund (IMF, 2000; World Bank, 1999).
78 An unofficial market emerged in which frozen foreign currency deposits were sold for about a 97 percent haircut (ECHR, 2010).
79 U.S. dollar amounts are computed using an exchange rate of KM 1.65 per U.S. dollar. Out of the outstanding 1.3 million deposit accounts, around 800,000 did not exceed KM 100 (U.S. $65) (IMF, 1998).
80 U.S. dollar amounts are computed using an exchange rate of KM 1.59 per U.S. dollar.
81 U.S. dollar amounts are computed using the 2003 exchange rate.
82 See the RS law of July 2004, the FBH law of November 2004, and parallel laws for the state and Brčko District (IMF, 2005a).
Claims related to bank loans were paid in cash (IMF, 2004a). Efforts were made to ensure the same treatment for classes of claims between entities, notably in respect of frozen foreign-currency deposits. The Constitutional Court, however, rejected the terms of the plan in the RS regarding war damages and those in the FBH concerning frozen foreign currency accounts, since the terms did not respect the proportionality requirement and constitutional property rights (IMF, 2005a; Ecorys, 2007). The Court ruled that state law should govern the frozen foreign currency accounts (IMF, 2005a).

Following several Constitutional Court decisions and in April 2006, the BiH ratified a law for settling around KM 2 billion (US$ 1.26 billion) of claims arising from frozen foreign currency deposits, using cash for small deposits and 13-year maturity bonds for larger ones (OHR, 2006a). Contrary to what was originally set in the state law, the entities opted for different contractual terms. Verified claims until the end of 2007 up to KM 1,000 in the FBH and up to KM 2,000 in the RS were settled in cash (Central Bank of Bosnia and Herzegovina, 2008; OHR, 2009). The remaining part was settled in bonds (OHR, 2006a, 2007). In the RS, bonds featured a five-year maturity, a 2.5 percent coupon, and an amortizing structure, whereas in the FBH they featured the same coupon rate but a seven-year maturity amortizing structure (Central Bank of Bosnia and Herzegovina, 2009, 2010; OHR, 2009; Reuters, 2008). Additionally, interest accrued on frozen foreign currency deposits from January 1, 1992, to April 15, 2006, was cancelled and calculated anew at an annual rate of 0.5 percent (OHR, 2006a, 2006b, 2009; ECHR, 2010). In the RS, payments of both principal and interest of bonds were timely, while in the FBH and Brčko District payments were delayed for three to eight months and were only settled from September 2008 to May 2009 (ECHR, 2010).

Entities also adopted different terms regarding war damage claims. The RS issued bonds featuring a 13-to-15-year maturity, a three-to-five-year grace period, and a 1.5 percent interest rate to compensate their holders for material and immaterial damages incurred during the war (Seenews, 2008). The FBH bonds, instead, featured a 14-year maturity, a nine-year grace period, and a 2.5 percent interest rate (Central Bank of Bosnia and Herzegovina, 2011, 2015). General liabilities amounting to KM 0.2 billion (US$ 125.8 million) in the RS, which included wages and other arrears, were scheduled to be settled through 25-year bonds issued by mid-2007, with a 15-year grace period and a 1.5 percent interest rate. Conversely, in the FBH, given the negligible amount of these liabilities, the government started settling general liabilities in cash. The terms for settling

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81 Bonds issued to settle war damages featured average maturities and grace periods of 36 and 26 years, and zero interest (IMF, 2005a, 2004a).

82 See the ruling of the Constitutional Court of the BiH on December 17, 2004, and the ruling of the Human Rights Commission of the BiH Constitutional Court on April 6, 2005 (IMF, 2005a). Problems concerned the long maturity of the bonds and their interest rate, which was considered not fair. The ruling mandated a maximum maturity of 15 years for bonds and the addition of coupons at “fair” (market) rates (IMF, 2005b).

83 U.S. dollar amounts are computed using an exchange rate of LCU 1.59 per U.S. dollar.

84 According to the Law, the settlement of frozen foreign currency accounts and that of external debt had the same priority (OHR, 2007).

85 Delays also occurred relative to the due issuance of bonds (ECHR, 2010).

86 U.S. dollar amounts are computed using the 2006 exchange rate.
very large restitution claims remain unclear (IMF, 2006; Ecorys, 2007). In total, the BiH issued bonds amounting to 11.3 percent of GDP in NPV terms to compensate for verified unpaid domestic claims (Flanagan, 2008).

The BiH also accumulated additional domestic and external arrears throughout this period (IMF, 1998). In particular, in the RS a significant stock of budgetary arrears emerged in 2000 (9.3 percent of GDP or US$ 427.8 million), and 2001 (9.8 percent of GDP or US$ 464.5 million), which had been cleared by 2010 (IMF, 2010).

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89 Restitution claims refers to confiscations that occurred from 1945 (IMF, 2004a, 2005a). In a draft law, authorities indicated their intention to maximize restitution in kind and cap monetary compensation at KM 3 billion. We could not find the final law.

90 The government did not cancel those arrears because it would breach its contract with civil servants (IMF, 2002, 2001).
References


Brazil (1986)

Framing the crisis

From the early 80s, the fiscal deficit started spiraling out of control, which pushed up inflation rates (World Bank, 1988). In reaction, the Brazilian authorities raised nominal rates, pushing real rates to the historically high level of 10 percent. Despite interest rate hikes, inflation reached 230 percent in 1985, forcing the government to introduce a stabilization program on February 28, 1986, called the Cruzado Plan (World Bank, 1988). Among other measures, the Plan abolished the indexation of most financial instruments, triggering a default (World Bank, 1988; Pedras, 2010).

Details on domestic debt restructuring

The abolition of inflation indexation applied to the Obrigações Reajustáveis do Tesouro Nacional (ORTNs), which amounted to NCz$79.73 billion (U.S.$12.27 billion) in 1985 (Brandao, 1989). Originally, ORNTs featured a maturity from 1 to 20 years, with their principal linked to a moving average of the wholesale price index (Goldfajn, 1998; Bevilaqua et al., 2001). In turn, auctions determined the yields. Through Decree-Law 2284/86 of February 1986, the Cruzado Plan, changed the principal repayment structure of ORTNs, dropping the indexation element. The new bonds, called non-indexed Obrigações do Tesouro Nacional (OTN), featured a 6 percent yield (initially fixed for one year), payable twice per year, and maturities from 6 months to 20 years (Fernandes and Turolla, 2005).

The de-indexation reduced the market’s appetite for Treasury bills (Letras do Tesouro Nacional - LTNs) and OTNs. With Resolution No. 1124/86 in May 1986, the Central Bank of Brazil introduced a new instrument to facilitate the government’s access to financial markets: Letras do Banco Central (LBC). The new instrument featured maturities up to one year, no coupon, and a floating face value that was corrected daily. The corrections were done using either the average daily rates prevailing in the Special System for Settlement and Custody (Sistema Especial de Liquidação e Custódia - SELIC) or the overnight market rate, which closely followed inflation (Bevilaqua et al., 2001; Fernandes and Turolla, 2005; Pedras, 2010; Tavares and Tavares, 2010). In June 1986, the central bank exchanged NCz32.98 billion (U.S.$2.38 billion) of OTNs with LBCs.

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91 Until 1987, the Central Bank of Brazil issued government securities on behalf of the Treasury. If the bids offered in the primary market were not considered acceptable, the central bank could keep the securities on its own balance sheet. Decree Law 2376 later clarified the relationship between the Central Bank of Brazil and the Treasury (World Bank, 1988).

92 Other measures included a currency change, price freezes, wage readjustments and freezes (wages were to be adjusted if inflation surpassed 20 percent), readjustments and freezes on rents and mortgage payments, and an exchange rate peg with the U.S. dollar.

93 These instruments (also called adjustable national Treasury bonds) were introduced in 1964 with the aim of establishing a national public bond market in Brazil (see Law 4357). Before their introduction, there had been no market for public bonds (Fernandes and Turolla, 2005).

94 U.S. dollar amounts are computed using an exchange rate of LCU6.5 per U.S. dollar (World Bank, 1988).

95 LTNs, introduced in 1970 through Decree-Law 1079, were discounted, fixed-rate bonds with a maturity initially set at 28 days (Bevilaqua and others, 2001; World Bank, 1988). By January 1973, the maturity had increased to 365 days (Fernandes and Turolla, 2005).

96 The SELIC rate is the interest rate set by the Central Bank of Brazil to implement monetary policy. It is computed as the average weighted rate of daily repo operations with public securities registered in the SELIC system. It formed the basis for all Brazilian interest rates in times of hyperinflation and Tavares, 2010).
Due to the change in maturities and rates, OTN holders suffered a capital loss (Welch, 1991; World Bank, 1988).97

Even though the Cruzado Plan reduced the monthly inflation rate to 0.9 percent, inflationary pressures resumed in November 1986 due to the price adjustment of some publicly provided goods, indirect taxes, and large wage increases. Inflation reached 17 percent per month at the beginning of 1987 and the government approved a new program with the aim of reducing inflation, in July 1987, called the Bresser Plan (Ayres et al., 2019, pp. 12–15).

At the end of 1987, NCz$61.3 billion (U.S.$848.44 million) of LBCs were replaced by another new short-term instrument called Letras Financeiras do Tesouro (LFTs), which were introduced in November 1987 through Decree-Law 2376/87 (Brandao, 1989).98 The National Treasury issued LFTs and designed them in a similar way to LBCs. However, LFTs did not feature a one-year maturity limit, but rather their maturity changed with each issuance (Fernandes and Turolla, 2005; Tavares and Tavares, 2010).99 All debt involved in the 1986 and 1987 exchanges was denominated in local currency, as reported by Bevilaqua et al. (2001).100

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97 U.S. dollar amounts are computed using an exchange rate of LCU13.84 per U.S. dollar (World Bank, 1988).

98 U.S. dollar amounts are computed using an exchange rate of LCU72.25 per U.S. dollar (World Bank, 1988).

99 Access to these instruments was limited to financial institutions belonging to the SELIC.

100 Bondholders suffered losses from the de-indexation. Given high inflation, the quantification of those losses became difficult and took decades. Finally, court-ordered reparations required banks to reimburse bondholders.
References


118, 309, 316,
Brazil (1990)

Framing the crisis

After several failed attempts to bring inflation under control, the government adopted a new plan in January 1989, known as the Summer Plan, which included tightening both monetary policy and fiscal measures (Bresser Pereira and Nakano, 1991). However, the plan proved unsuccessful. The government either cancelled or did not implement the reform measures, as it did not have enough political power to carry the plan through (Ayres and others, 2019, pp. 12–15). As a result, inflation remained out of control, reaching 1,430 percent on an annual basis in 1989 (Pedras, 2010). Following the suspension of interest payments on external debt in August 1989, the government lost access to international capital markets and had to rely on local investors and seigniorage to finance its deficit. Consequently, domestic debt quickly soared, reaching 50 percent of GDP in 1989 (Bresser Pereira and Nakano, 1991). At the time, domestic debt was mostly composed of LFTs, with a five-month average maturity and a yield indexed to the SELIC rate.

In the run-up to the 1990 presidential elections, sovereign yields increased noticeably after candidate Luis Ignacio da Silva vowed to default on government debt if he won.101 In the end his rival, Fernando Affonso Collor de Mello, prevailed. On the inauguration day, the newly elected president announced Collor Plan I, which aimed to bring inflation down and resume fiscal March 15, 1990 (Ferreira and Bonomo, 2006). Among other measures, Collor Plan I included a default on domestic debt as part of a freeze that affected 70 percent of existing financial assets held by the private sector (Welch, 1991; Font and Spanakos, 2004; Bevilaqua and others, 2001).102

Details on domestic debt restructuring

According to the Collor Plan, U.S.$62 billion of local currency bonds were frozen for 18 months (Bevilaqua and others, 2001; Beers and Chambers, 2006; Ferreira and Bonomo, 2006).103 Frozen assets were forcibly converted into debt instruments called Bônus do Tesouro Nacional Série Especial (Fernandes and Turolla, 2005), which featured an 18-month maturity and paid an interest rate close to 18 percent a year.104 The freeze reduced interest payments considerably, as bonds were indexed to the SELIC rate, which had reached 3.63 percent per day before the freeze.105

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101 Daily interest rates peaked at 3.63 percent on February 19, 1990, the equivalent of 790.799 percent on an annual basis (Taylor, 2014).
102 Additionally, the Collor Plan introduced a 45-day wage and price freeze as well as a plan to privatize public enterprises (Collor Plan II, January 1991). The plan was based on using self-destructive certificates that banks, pension funds, and insurance companies were required to buy. The face value of the certificates was initially set at Cr$1,000 and scheduled to deteriorate at 1 percent per month (Welch, 1991).
103 See the LEI No. 8.024 and No. 8.177, implemented between April 1990 and March 1991 (Franco, 2017).
104 Bônus do Tesouro Nacional Série Especial featured similar characteristics to the BTN (Bônus do Tesouro Nacional), created in 1989 through Decree 7777/89, as indexed instruments. BTNs featured a 25-year maturity and a 12 percent interest rate, calculated on the adjusted nominal value. BTNs were adjusted through an inflation index and exchange rate indexation (Fernandes and Turolla, 2005; Pedras, 2010; Ferreira and Bonomo, 2006). In March 1990, the adjustment of BTN was limited to 41 percent (Bresser Pereira and Nakano, 1991).
105 The operation produced a maturity extension, as new instruments featuring an 18-month maturity replaced maturing ones (Vitorino, 2020).
The restructuring episode also involved an 18-month freeze of demand, savings, and overnight deposits, worth U.S.$66.5 billion and roughly equivalent to 30 percent of Brazil’s GDP (Moody’s, 2008; Lloyd’s List International, 1990).\(^{106}\) Deposits featured 29.3 percent average interest in 1990 and were denominated in local currency (IMF, 1998). The freeze affected savings and checking accounts in excess of the equivalent of U.S.$1,000 and overnight accounts in excess of U.S.$500 (Mas, 1995). Holders of overnight accounts could remove 20 percent of their funds, while individuals could remove around U.S.$1,200 from checking and savings accounts (Welch, 1991). The remaining part was placed in a non-tradable indexed account at the central bank, which paid a monthly 0.5 percent interest rate, which the government set unilaterally (Ayres et al., 2019, pp. 12–15). The nominal value of those instruments was revalued according to the inflation rate plus 6 percent per year (Ferreira and Bonomo, 2006; Mas, 1995).\(^{107}\) Deposit holders suffered a 65 percent haircut (Moody’s, 2008).

All frozen assets were returned to their owners without a nominal reduction in 12 monthly installments starting on September 16, 1991, except where the central bank decided on a case-by-case basis (Bevilaqua et al., 2001; Franco, 2017; Mas, 1995).

\(^{106}\) Amounts in U.S. dollars are computed using an exchange rate of LCU42.3 per U.S. dollar (Bresser Pereira and Nakano, 1991).

\(^{107}\) See Medida PROVISÓRIA No 200, DE 27/7/1990 and Lei nº 8.088 de 31/10/1990.
References


Brazil (1993)

Framing the crisis

Since the 80s, the debt of the Brazilian states increased immensely due to the lack of effective controls on borrowing. As a result, the federal government had to implement several debt-rescheduling programs to relieve them from both external and domestic debt (IMF, 1998). The first intervention focused on external debt and occurred in December 1989, through Law 7976, when the federal government took over the debt of the states with maturities longer than one year and those that had been contracted before December 1988 (Bevilaqua, 2002). Bonds issued by states and revenue anticipation loans held by private banks were included in the restructuring process (Dillinger, 1997; Rodden, 2002). In turn, the states incurred an equal liability to the federal government, amounting to U.S.$19 billion (Dillinger, 1997). The new debt was denominated in domestic currency and featured a 20-year maturity (longer than the old debt), a five-year grace period for principal payment (Bevilaqua, 2002), and an interest rate equivalent to those paid by the federal government on its external debt with inflation indexation. The 1989 restructuring did not resolve the problems related to the debt of the states. In June 1993, the federal government launched the Programa de Ação Imediata to control the deficits of subnational governments (Ayres et al. 2019, p. 16). Three debt restructuring episodes focused on domestic debt occurred between 1993 and 1996, as the federal government took over the debt of the states and implemented several debt-rescheduling operations (IMF, 1998).

Details on domestic debt restructuring

The first rescue operation occurred in November 1993 (through Law No. 8727), after the states had stopped servicing their debts (Bevilaqua, 2002). The episode involved all debt the states and their enterprises owed to federal financial institutions (mostly to the federal housing and savings bank called Caixa Economica Federal) and totaled U.S.$28 billion (Dillinger, 1997; IMF, 1998). Bonds the states issued were instead excluded from the renegotiation. Under the terms of the rescue operation, the maturity of state debt was set to 20 years, and interest rates were set equal to the weighted average of the original contracts, which ranged from 6 to 8 percent, plus an inflation adjustment (Bevilaqua, 2002; Dillinger, 1997; IMF, 1998). Additionally, states obtained a 20-month grace period on 60 percent of the principal (Dillinger, 1997; IMF, 1998). While the rescue package reduced debt service obligations by capitalizing interest on existing debt, it also increased debt stock (Dillinger, 1997).

The government introduced the second intervention, called Plan Real in mid-1994, which succeeded in bringing inflation back under control, but the states lost the possibility of reducing real salaries and pensions via

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108 The Brazilian government had guaranteed the debt of the states (Dillinger and Webb, 1999).
109 According to the rescue plan, the states paid an upfront fee, and up to 13 to 15 percent of their net revenues to the government, every year, as service of the debt transferred (Ferreira and Bonomo, 2006).
110 The principal on rescheduled domestic debt was indexed to the average interest rate paid on deposits (Dillinger, 1997).
111 An escape clause was introduced, which applied retroactively to the rescheduled foreign debt and to specific other debts to the government. According to the clause, in the occurrence of a state debt service to revenue ratio above a threshold fixed by the Senate, the debt service excess could be deferred. The states could capitalize the deferred amount into the debt stock and repay it once debt service fell below the threshold, or in the 10-year period after the original 20-year payment period (Dillinger, 1997).
inflation. As a result, payrolls soared, absorbing 80 to 90 percent of the revenues of the states. Faced with increasing expenses and high debt-servicing costs, the states defaulted on domestic debt worth R$31 billion (U.S.$31 billion) (Dillinger and Webb, 1999). In June 1994, as the states were facing difficulties in placing bonds with private financial institutions, the government authorized a bond exchange of unmarketable state bonds for central bank bonds (Central Bank Resolution 2081).

A third federal intervention occurred in the third quarter of 1996 and involved a restructuring of the debt of the states, which combined debt forgiveness (for 80 percent of the total) and debt amortization (for 20 percent of the total). Previously rescheduled debt was excluded from this restructuring. The operation was financed through privatization of public companies (Dillinger and Webb, 1999). Law 9496 of September 1997 guided the restructuring of the largest portion of debt involved in the restructuring episode—R$87 billion (U.S.$86.5 billion) out of R$143 billion (IMF, 1998). Under the Law, the new debt featured maturities ranging from 15 to 30 years, and interest rates were set at 6 percent plus a correction, which was lower than the prevailing market rates (IMF, 1998). In 1997, interest rates were 10.5 percentage points lower than the market rates, and in 1998, new rates were 17 percentage points below market rates (Bevilaqua, 2002).

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112 The inflation rate reduced from 929 percent in 1994 to 9 percent in 1996.
113 In July 1994, Brazil introduced a new currency, the real, setting it at parity with the U.S. dollar — U.S.$1=R$1 (Ayres and others, 2019, p. 17). The states defaulted in three ways: (1) additional capitalization of interest on bonds, (2) defaults on revenue anticipation loans and accumulation of arrears, and (3) default on state banks (Dillinger, 1997; Rodden, 2002).
114 Debt forgiveness involved the states’ securitized debt.
115 In the dataset, we consider this amount as bonded debt.
116 A cap of 13 to 15 percent of net revenues was established for the annual debt-service ratio, and all debt service exceeding this cap was automatically capitalized (Bevilaqua, 2002).
117 The restructuring featured discrimination among states with real interest rates and maturities set differently across states (Bevilaqua, 2002).
References


**Cameroon (1993)**

**Framing the crisis**

Expansionary fiscal policies accompanied the oil boom in the 1970s and 1980s, undermining Cameroon’s fiscal position. The government started reducing spending and implementing structural reforms close to the end of the oil boom in the late 1980s. Yet, when the economy entered into a recession in 1987, which lasted until the end of the 1990s, it kick-started a soaring debt-to-GDP ratio and from 1993 it led to accumulating payment arrears (IMF, 2007).

**Details on domestic debt restructuring**

In 1998, the government introduced a plan to clear CFAF 495.9 billion (US$ 840 million) of domestic arrears accumulated from July 1993 to June 1997 (IMF, 1998a; 1998b), 36 percent of which were banks arrears. The intention of the plan was to provide “a transparent, irreversible, and equitable treatment involving each class of creditors” (Ramos, 1998).118 CFAF 90.6 billion was settled in cash or by compensation (mostly in 1997 and 1998), whereas CFAF 405.3 billion was securitized by issuing new bonds (55.5 percent of the securitization process occurred in 1997 and 1998).119 Most of the domestic arrears to banks were securitized (IMF, 1998b). Arrears to suppliers were securitized with zero-coupon Treasury bonds to mature from 3 to 12 years and paid a below-market interest rate. Salary arrears to civil servants were settled more favorably through cash payments and zero-coupon bonds with shorter maturities (AfDB-OECD, 2002; 2003).120

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118 Bilateral agreements were signed with the Social Security Fund and public enterprises that consolidated their arrears.

119 The securitization strategy reflected Cameroon’s limited access to both domestic and foreign debt markets. Cameroon opened an escrow account at the Central Bank to make timely payments of interest and principal (Ramos, 1998).

120 The first redemption of these bonds occurred in June 2002, with a CFAF 29 billion (US$ 40 million) payment (AfDB-OECD, 2003).
References


Cameroon (2001)

Framing the crisis

Cameroon’s debt-to-GDP ratio stood at 60.4 percent in 2002, and debt service payments absorbed most of government expenditure. The fiscal deficit widened in 2003 and 2004 as a result of significant budget slippages. Budgetary pressures were partly covered accumulating domestic arrears. Weak management of public enterprises also added fiscal (contingent) liabilities (IMF, 2005). In addition, Cameroon found itself in a weak external position with current account deficits averaging 3.7 percent of GDP from 2000.

In 2001, Cameroon started accumulating domestic arrears with banks, contractors, and other creditors. In 2002, the government also defaulted on its domestic bonded debt (Cbonds, 2005; Markit, 2004). At that point, around half of the domestic debt stock was composed of locally traded bonds issued to clear previous domestic arrears (Moody’s, 2017).

Details on domestic debt restructuring

CFAF 8.9 billion (US$ 0.017 billion) in Treasury bonds maturing from 2002 to 2004 were repaid in April 2005 (Cameroon Tribune, 2005), while CFAF 35 billion (US$ 0.066 billion) of Treasury bonds maturing in 2005 were settled in July 2005, including interests (Fombe, 2005). In September 2004, Cameroon also defaulted on US$ 1 billion of local currency-denominated bonds (Moody’s, 2013; 2017). However, Moody’s (2013) reported that the default had been cured by mid-2005. Although the restructuring exercise extended maturity, we do not have information about reductions in face value and coupons (Moody’s, 2013).

Debt from banks (CFAF 323.6 billion, or US$ 612.8 million) was repaid in November 2004 without any reduction of the principal (IMF, 2005a; Moody’s, 2008). Other domestic arrears amounted to CFAF 179.9 billion (US$ 340.7 million) as of end-2004 (IMF 2005a; 2005b). Following several domestic debt audits, concluded in October 2005, the government devise a plan to settle arrears, which envisaged the rescheduling of the debt owed to almost all creditors over several years (IMF, 2007; Moody’s, 2017). Debt owed to other creditors increased to CFAF 440.3 billion (US$ 833.9 million) (IMF, 2005a). The exercise discriminated between creditors. Contractors’ debt was subject to less favorable treatment than the rest of domestic debt, but information on the specific details of the terms is not available. According to the IMF (2009), the government introduced a new plan to clear domestic arrears in 2009.

121 Starting in late 2005, Government revenues increased significantly because of higher-than-expected oil prices and the fiscal austerity measures undertaken, which allowed the country to make substantial repayments of domestic debt.

122 The dollar amount is computed using the exchange rate of CFAF 528 per U.S. dollar in 2004 (IMF, 2005a, 2007).

123 Claims amounting to CFAF 46 billion were already cleared between 2002 and 2004 (IMF, 2005a).
References


Framing the crisis

The deficit increased from 2012 to 2015 as a result of dwindling oil revenues combined with growing government expenditures. During this period, the fiscal deficit averaged 3.55 percent and the public debt-to-GDP ratio rose from 15.4 percent of GDP in 2012 to 32.5 percent in 2015. The government accumulated significant domestic arrears, originating mostly from unfunded subsidies, transfers, and counterpart funds of projects (IMF, 2017).

Details on domestic debt restructuring

Authorities conducted several audits to identify, evaluate the existing stock of domestic arrears, and to elaborate a clearing strategy.¹²⁴ The largest shares of the arrears pertained to counterpart funds, and to domestic companies and individuals. The bulk of the remainder consisted of unpaid transfers and subsidies (IMF, 2018b).¹²⁵ At the end of 2018, the government designed a plan to clear CFAF 495 billion (US$ 0.891 billion) of domestic arrears accumulated from 2015 to 2018 (IMF, 2018a). Unpaid contributions and debt to companies and individuals were to be paid in full, whereas gradual payments based on individual project needs were decided for counterpart funds (IMF, 2018b). CFAF 68 billion arrears were cancelled in 2017, and CFAF 233 billion were cancelled in the first half of 2018. Due to the clearance plan, the stock of domestic arrears fell to CFAF 282 billion in 2017, and to CFAF 232.8 billion in September 2018 (IMF, 2018d).


¹²⁵ The audit also pointed out weaknesses in the accounting system of the Treasury. It identified some domestic arrears based on physical documents but not captured by the accounting system and some payment arrears in the accounting system without related documentation (IMF, 2018b).


Cape Verde (1998)

Framing the crisis

In 1992, Capo Verde approved an economic adjustment program seeking to stabilize fiscal balances liberalizing the economy and unleashing growth potential. However, government’s practice of financing public deficits with high interest domestic debt derailed the program (IMF, 2001). The stock of domestic debt rapidly grew to unsustainable levels and, at the end-1997, domestic debt peaked at CVEsc 17.7 billion (US$ 180 million or 40 percent of GDP) with domestic debt-service payments absorbing more than 3 percent of GDP (IMF, 1999; 2001).  

In February 1998, authorities adopted a new program aimed to reduce the stock of domestic debt and restore financial stability. The program involved a large reduction of domestic debt and it received the support of multilateral institutions (IMF, 1999; 2001; Bourdet, 2000).  

Details on domestic debt restructuring

In August 1998, the government decided to restructure the stock of domestic debt, converting short- and medium-term Treasury-bills, mostly held by a local bank and the central bank, into long-term debt (IMF, 2005). The debt-reduction operation was designed to take place through a trust fund, set to be funded partly by donors (US$ 100 million) and partly by privatization receipts denominated in foreign currency (US$ 80 million). The authorities decided to swap existing high-interest domestic debt (paying on average an annual interest rate of 8 percent), amounting to US$ 180 million (Banco de Cabo Verde, 2000; IMF, 2005), against cheaper, local currency-denominated securities (títulos consolidados de mobilização financeira - TCMFs). TCMFs featured a 20-year maturity and were issued and serviced by the trust fund (IMF, 2018; 2020).  

Delays in the privatization program and shortfalls in donor assistance led to a delay in the establishment of the trust fund. Authorities only started the debt-conversion operation in May 1999 (IMF, 1999a; 2001). Fiscal slippages in 1999 and 2000, reflecting unforeseen restructuring costs coming from the...
privatization of commercial banks, petroleum price subsidies and newly budgeted student scholarships, resulted in the creation of additional domestic debt and led to the suspension of the domestic debt reduction operation in early 2001 (IMF, 2001; 2003; World Bank, 2004). As a result, the operation only involved US$ 115.4 million (CVE 11.35 billion) of domestic debt, 56.4 percent of which was held by a commercial bank, 40.5 percent by the central bank, and 3 percent by a pension fund and an insurance company (IMF, 2020).
References


https://www.jstor.org/stable/pdf/40174838.pdf?refreqid=excelsior%3A9d4de7c0bfeb78a1e7880083818fe5b6


——— (1999a). Public Information Notice: IMF Concludes Article IV Consultation with Cape Verde


http://www.portaldoconhecimento.gov.cv/bitstream/10961/190/1/Reat%C3%B3iro%20Despesas%20P%C3%BAblicas%20-%20Saude.pdf
Cape Verde (2018)

Framing the crisis

According to the law that established the trust fund in August 1998, TCMFs had to be bought back in a 20-year period, using budgetary resources, as fiscal and monetary conditions would permit (IMF, 1999; 1999b; 2001). However, when TCMFs matured in August 2018 they were not repaid (PAICV, 2019).

Details on domestic debt restructuring

In December 2018, the government issued a decree for the repayment of CVE 300 million TCMFs (US$ 3.21 million) and for the replacement of the remaining stock with new amortizing bonds featuring a 20-year maturity and an interest rate of up to 3 percent. The decree also allowed debt exchanges between bondholders on conditions to be agreed between parties. TCMFs held by the insurance company Garantia were redeemed in January 2019, reducing the amount of outstanding TCMFs to CVE 11.33 billion (US$ 115.03 million) as of 2019.

In June 2019, authorities decided to close the trust fund and to use its remaining resources to create a Sovereign Private Investment Guarantee Fund (SPIGF), and an Emergency Fund to be used in case of natural disasters. According to the original plan, the Treasury was tasked with issuing bonds at 3 percent interest rate to replace outstanding TCMFs (IMF, 2020). At end-April 2020, however, authorities amended the original plan. Under the new approach, the SPIGF was tasked with swapping the total stock of TCMFs with income securities (Títulos-Rendimentos de Mobilização de Capital – TRMCs). As a result of the swap, TCMFs were replaced with equity in the SPIGF (IMF, 2020a). In 2021, the private pension fund (INPS) negotiated with the government preferential conditions for the exchange of TCMFs with TRMCs (Ministerio das Financas, 2021)

From 1999, Cape Verde also accumulated domestic arrears, mostly to suppliers (World Bank, 2004). In 2000, outstanding claims amounted to CVEsc 1.5 billion or US$ 12.94 million (IMF, 2001). In early 2001, the newly appointed government committed to repay these arrears through a combination of cash payments, government securities, compensation with tax arrears, and restructuring agreements (IMF, 2002; 2003; World Bank, 2004). In 2002, authorities made a cash settlement of domestic arrears amounting to 2.7 percent of GDP, thereby reducing the stock of unpaid claims to CVEsc 1.1 billion (IMF, 2003; 2003a). In 2004, authorities verified obligations of CVEsc 739 million (US$ 9.12 million) to a commercial bank for unpaid interest subsidies and other fees (IMF, 2004). As reported by the African Development Bank (2011), Cape

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131 Amounts are computed using the exchange rate of 93.4136LCU per U.S. dollar.
132 After the private pension fund (INPS) purchased the bonds held by the commercial bank Banco Comercial do Atlântico (Asemana, 2019), the remaining TCMF holders are the Central Bank and the pension fund. Amounts are computed using the exchange rate of 98.495LCU per U.S. dollar.
133 According to law creating the SPIGF, the income securities were tradable (IMF, 2020a).
134 Amounts are computed using the exchange rate of 115.876LCU per U.S. dollar.
135 Amounts are computed using the exchange rate of 81.05LCU per U.S. dollar. As we found no additional information regarding this episode, we consider the recognition of arrears as the end date of the episode.
Verde cleared all domestic arrears in 2010 after the implementation of several budgetary and financial management reforms.
References


Central African Republic (1992)

Framing the crisis

From 1990 to 1993, real GDP per capita dropped 9 percent in the Central African Republic (C.A.R.) amid a severe economic crisis and political instability. Two main factors explain the deterioration of the economy. First, the currency was overvalued, which resulted in declining exports and a worsening current account deficit. Second, the undergoing democratization process exposed C.A.R.’s institutional vulnerabilities. Between 1990 and 1993, government revenues declined from 11 percent of GDP to 7.9 percent due to rampant tax evasion as well as prolonged strikes affecting government’s ability to collect tax revenues. Meanwhile public expenditure remained constant. The C.A.R. also hardly paid its external debt, which resulted in international assistance drying up (IMF, 2004a). From 1992, the C.A.R. started accumulating domestic arrears, mainly toward civil servants, military personnel, and domestic banks (IMF, 2004b).

Details on domestic debt restructuring

The government undertook several audits to verify the stock of domestic arrears. The results of the auditing exercises were reported in December 2003 (2004a) by the IMF and identified CFAF214.9 billion in verified claims (31 percent of GDP), divided into arrears to banks (CFAF7.8 billion), to the Banque des États de l’Afrique centrale – BEAC (CFAF5.1 billion), to suppliers (CFAF93.2 billion), to the pension agency OCSS (CFAF35.5 billion), and salary arrears (CFAF63.3 billion). Outstanding arrears remained unresolved for more than a decade. The government of C.A.R also accumulated further arrears, following the outbreak of a civil war in December 2012 that led to a 36 percent contraction of GDP (IMF, 2010, 2012). The 2016 presidential and legislative elections marked the end of political instability and the return to democracy (IMF, 2016). The newly elected government embarked on a reform program, which focused on improving governance and economic management (IMF, 2016). Along these lines, the C.A.R. started a comprehensive domestic arrears clearance plan.

Arrears with domestic banks consisted mainly of overdue loans to public enterprises guaranteed by the government (IMF, 2004a). In July 2017, all banks signed an agreement to reschedule claims amounting to CFAF26.1 billion over an eight-year period (IMF, 2016, 2017a, 2017b). According to the agreement, which did not envisage any nominal haircut, interest rates were reduced from 8.5 percent to 2.95 percent, with payment starting in October 2017 (IMF, 2017b, 2018; Tresor Direction Generale, 2018). According to the IMF (2016), the overdue loans were mostly either borrowed or serviced in local currency.

136 Using an exchange rate of CFAF275.32 per U.S. dollar, verified claims amounted to U.S. $780 million of which U.S. $28.3 million to banks, U.S.$18.5 million to the BEAC, U.S. $338.5 million to suppliers, U.S. $128.9 million to the OCSS, and U.S. $229.9 million to employees.

137 The ensuing governance concerns prompted donors to suspend budget support to the C.A.R. (IMF, 2012).

138 Government overdrafts from commercial banks were subject to real interest rates of about 15 percent (IMF, 2004a). To settle the arrears accumulated by the government, banks started to seize government revenue passing through the banking system (IMF, 2004a).

139 By using the exchange rate of CFAF546.95 per U.S. dollar, rescheduled claims amounted to U.S. $47.72 million.

140 Outstanding government payment arrears to banks amounted to around 50 percent of the sector’s NPLs (IMF, 2016).
Unpaid debt with the BEAC concerned overdue payments on statutory advances, consolidated loans, and exceptional advances. In April 2016, parties agreed to consolidate CFAF55 billion of liabilities, unpaid loans, and arrears in a single loan and to postpone repayments to March 2018 (IMF, 2016, 2017c). Exceptional and statutory advances of CFAF22.5 billion were excluded and later consolidated with another loan of CFAF55.9 billion. On August 5, 2017, the BEAC decided to eliminate statutory advances and to convert outstanding advances into long-term bonds. These advances, including a consolidated loan of CFAF55.9 billion, amounted to CFAF 79.2 billion and were set to be repaid from 2022 to 2031, with a 2.4 percent interest rate (IMF, 2017b).

The remaining outstanding domestic arrears were cleared through two different settlement plans (IMF, 2017b). In December 2008, the government approved a plan to repay wage and pension arrears over a 10-year period mainly in cash and arrears to suppliers, which were cleared at a discount in return for a quick repayment period (IMF, 2005, 2008, 2009a, 2009b). In November 2017, the government adopted a new plan to clear CFAF64.8 billion of domestic arrears related to pensions and wages by 2019 (IMF, 2017b, 2018). Additionally, the government scheduled to repay CFAF9.4 billion of arrears to contractors by mid-2018, applying a variable haircut depending on each creditor (IMF, 2017b, 2018). The repayment process proceeded more sluggishly than expected as disbursements were delayed due to identification problems and later-than-expected disbursements. The identification of additional outstanding claims, mainly related to social security and arrears to contractors (IMF, 2018, 2019) further slackened the repayment process.

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141 The government’s arrears toward the BEAC had already been consolidated in July 2000, with a schedule of repayments drawn up through 2010 (IMF, 2000).
142 By using the exchange rate of CFAF575.25 per U.S. dollar, consolidated liabilities amounted to U.S. $95.6 million.
143 Exceptional and statutory advances corresponded to U.S. $39.11 million.
144 By using the exchange rate of CFAF594.38 per U.S. dollar, the converted advances amounted to U.S. $133.24 million.
145 The government explicitly excluded the possibility to securitize its arrears, but it offered the possibility of swapping outstanding claims for lands (IMF, 2005, 2008, 2009a, 2009b). Pension arrears concerned unpaid contributions, advances of the OCSS to the government and parastatals, unpaid rents, and frozen assets of the OCSS at the Treasury (IMF, 2004a). Priority was given to clear arrears to suppliers.
146 Those arrears referred to claims dating back to 1993 (IMF, 2017b).
147 By using the exchange rate of CFAF553.6 per U.S. dollar, domestic arrears related to pensions and wages amounted to U.S. $117.05 million.
148 Arrears to contractors corresponded to U.S. $16.98 million.
149 The claims were revised down from CFAF14.2 billion at the end of 2016 after a verification process.
150 As claims kept accumulating, we do not assign an end date to this arrears episode.
References


——— (2010). “Central African Republic: Sixth Review Under the Arrangement Under the Extended Credit Facility and Financing Assurances Review—Staff Report; Debt Sustainability Analysis; Staff


Congo Republic (1992)

**Framing the crisis**

Decades of political instability, characterized by several coup d’états and political oppression, left the Congo Republic in fiscal distress (Clark, 1997). The armed conflicts inflicted extensive human life losses, displaced a large part of the population, damaged physical infrastructure severely, and destroyed productive capacity. From 1992 the government began to accumulate domestic arrears, mostly related to unpaid wages and pensions (IMF, 2000).

**Details on domestic debt restructuring**

The 1997 civil war, which lasted from June to October 1997, weighed on public finances, with the fiscal deficit reaching 7.5 percent of GDP in 1997. In addition, the conflict disrupted fiscal management, which resulted in significant amounts of external and domestic arrears (IMF, 1998).

The new government elected in November 1997 devised a comprehensive plan to deal with domestic debt and accumulated arrears. In July 1998, the government announced a plan to restructure CFAF560 billion (U.S.$996.07 million) of domestic debt, rescheduling payments over 15 to 20 years (starting in 1999) and using a combination of government bonds and notes tradable in the interbank and money markets. According to the plan, bonds were set to be redeemable through a lottery system (Reuters, 1998). Additionally, the government engaged in several audits of domestic debt claims to quantify, verify, and clear the accumulated stock of arrears (IMF, 2000). Audits were conducted for 2000, 2001, and 2002 concerning domestic payment arrears of a commercial nature and “social” arrears on wages and pensions (IMF, 2003). According to the results of the audits, arrears made up the bulk of domestic debt, which included unpaid civil-servant wages, pensions and rights of the employees of liquidated companies, and debt to suppliers (IMF, 2004; OECD, 2006).

In 2003, the government approved a plan to clear its outstanding “social” domestic arrears. The plan was implemented in December 2004, when the Caisse Congolaise d’Amortissement completed the authentication process (OECD, 2006). In this regard, the government signed an agreement with the unions to approve a gradual payment of wages, pensions, payments to embassies, and claims of former employees of liquidated firms, which amounted to CFAF345 billion (US$ 664.28 million) as of end-2004 (IMF, 2004). CFAF30 billion (US$ 53.95 million) was paid in 2005, and the remaining outstanding social arrears were set to be cleared by 2010 (IMF, 2006). In November 2005, the Congo Republic approved a plan to settle outstanding

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151 U.S. dollar amounts are computed using an exchange rate of CFAF562.21 per U.S. dollar.

152 Unfortunately, we did not find additional information about when the plan was effectively put in place.

153 The 1997 civil war produced severe damages on administrative infrastructure, and many records were lost (IMF, 2003).

154 The decision to start settling domestic arrears was made in December 2003 (OECD, 2006).

155 This was 15 percent of 2004 GDP (IMF, 2006). U.S. dollar amounts are computed using an exchange rate of CFAF519.36 per U.S. dollar.

156 U.S. dollar amounts are computed using an exchange rate of CFAF556.04 per U.S. dollar.
commercial arrears (IMF, 2006). According to the plan, claims less than CFAF10 million would be paid in full, whereas claims over threshold were set to be paid with a 25 to 66 percent haircut, depending on the terms of payment the creditor chose (OECD, 2006).

Due to weak management practices and severe cash constraints, the Congo Republic accumulated additional domestic arrears with government suppliers. Payment arrears amounted to 6.4 percent of non-oil GDP in 2013, 3.7 percent of non-oil GDP in 2016, CFAF972 billion in 2017 (18.9 percent of GDP), and CFAF 978 billion (15.3 percent of 2018 GDP) in 2018 (IMF, 2014, 2019).

References


Framing the crisis

Starting in 1986, plunging coffee and cocoa prices, which represent the two main exports of Cote d’Ivoire, pushed the country into a protracted recession.\(^{157}\) Fiscal revenues fell, forcing the government to rely on domestic borrowings to finance expenditures. In 1989, as the fiscal deficit reached 17 percent of GDP, the government accumulated CFAF117 billion (U.S.$404.28 million) in arrears with the insurance sector and domestic banks, corresponding to 39 percent of banks’ claims on the state (African Development Bank, 1996, 1997).\(^{158}\)

Details on domestic debt restructuring

With the approval of a financial-sector adjustment plan in December 1991, the government undertook a restructuring of the banking system, which included settling arrears accumulated with the banking sector (African Development Bank, 1996, 1997; IMF, 2000, 2009). CFAF211.6 billion (U.S.$816.99 million) of claims were settled: CFAF46.5 billion in cash and CFAF165.1 billion with the issuance of government securities featuring a 3 percent interest rate and 15-year maturity (African Development Bank, 1996, 1997).\(^{159}\) Arrears to commercial banks were resolved without a reduction of the principal in 1997 (IMF, 2000).

Lengthy negotiations reduced the total amount of arrears to the insurance sector (including insurance policies, government securities, and unpaid salaries) from CFAF39 billion to CFAF18.2 billion (U.S.$62.89 million), as some claims were deemed unjustified. Arrears were settled using cash (CFAF7.6 billion), offsetting debts (CFAF3.6 billion), and through a loan by the Caisse Autonome d’Amortissement (CAA) (CFAF7 billion) featuring a 10 percent interest rate (African Development Bank, 1996, 1997).

State and public-sector arrears to the CAA amounted to CFAF62.77 billion in 1991.\(^{160}\) In June 1994, after extensive negotiations, CFAF30.5 billion was converted into government securities, featuring a 15-year maturity, a 2-year grace period, and an interest rate designed to decline from 0.75 percent to 0.5 percent over the repayment period. Subsequently, an additional CFAF1.86 billion in claims were securitized through government securities featuring a 15-year maturity, a 2-year grace period, and a 3 percent interest rate.\(^{161}\) The remaining amount was settled through allocating provisions and reserve balances as well as the consolidating recoverable debt (African Development Bank, 1996).

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\(^{157}\) The cocoa sector, which accounted for 15 percent of GDP, had a fundamental role in the economic performance of Cote d’Ivoire (IMF, 2000).

\(^{158}\) The reported amount refers to September 1989 (African Development Bank, 1997). U.S. dollar amounts are computed using an exchange rate of CFAF289.4 per U.S dollar.

\(^{159}\) U.S. dollar amounts are computed using an exchange rate of CFAF259 per U.S dollar.

\(^{160}\) Since these are intra-public sector arrears, we do not report them in the dataset.

\(^{161}\) The first interest payment was scheduled for June 30, 1995 (African Development Bank, 1996).
References


Cote d’Ivoire (2001)

Framing the crisis

After growing rapidly in 1998 and 1999, the economic situation deteriorated sharply in 2000. Real GDP contracted 2.1 percent, amid worsening terms of trade. The economic slowdown brought about declining fiscal revenues and a widening fiscal deficit reaching 1.4 percent in 2000. Arrears began to pile up again in 2001, including arrears to domestic banks (IMF, 2001).

Details domestic debt restructuring

In December 2001, the estimated stock of domestic arrears was CFAF 361 billion (US$ 485.01 million or 4.7 percent of GDP).\textsuperscript{162} According to the clearance plan the government approved in 2002, parties agreed to repay CFAF 104 billion (US$ 139.73 million) of arrears to domestic banks over a five-year period at an average interest rate of 8 percent (IMF, 2002). Regarding the other domestic arrears, CFAF 88 billion were set to be paid in cash while remaining arrears were rescheduled (IMF, 2002).

\textsuperscript{162} U.S. dollar amounts are computed using an exchange rate of CFAF 744.31 per U.S dollar.
References


Cote d'Ivoire (2011)

Framing the crisis

Cote d’Ivoire started struggling with political instability in December 2010 following presidential elections that led to the establishment of two conflicting administrations: the incumbent president headed one and the winner of the election headed the other. The political turmoil had far-reaching consequences: real GDP declined 4.7 percent and the fiscal deficit-to-GDP reached 5.7 percent in 2011 (IMF, 2011). In addition, regular auctions of Treasury securities were suspended.163 To limit the impact of the political standoff on the regional banking system, the Banque Centrale des États de l’Afrique de l’Ouest (BCEAO) agreed to roll-over short-term local currency denominated Ivoirian T-bills (with maturities up to one year).164 The crisis ended in April 2011 when forces of the newly elected president arrested his rival (The Guardian, 2011; BBC, 2011). A new government was established on June 1, 2011 (IMF, 2011). In October 2011, the new government started negotiations with creditors to restructure government debt and end Cote d’Ivoire’s dependence on BCEAO’s roll-over operations (Moody’s, 2014). Following the negotiations, domestic debt was restructured in December 2011.165

Details domestic debt restructuring

The restructuring exercise featured a maturity extension and an interest rate reduction and affected CFAF 608 billion (US$ 1.23 billion) of local currency-denominated T-bills (IMF, 2012).166 T-bills with interest rates ranging from 5.1 to 6.4 percent were restructured into 2-year T-bills with a 4.75 percent interest rate, 3-year OAT bonds (Obligations Assimilables du Tresor) with a 5 percent interest rate, and 5-year OAT bonds with a 5.25 percent interest rate.167 CFAF 20 billion in accumulated missed interest rate payments were paid in cash (IMF, 2011).6 The participation rate reached 96 percent (Moody’s, 2014) and involved mostly commercial banks in the West African Economic and Monetary Union (WAEMU). These banks held almost two thirds of short-term domestic securities in 2011.168 Creditors suffered an NPV loss estimated at 5 percent (Moody’s, 2013).

In March 2012, the government restructured the remaining 4 percent of the domestic debt, owned by two Senegalese banks. These banks held-out during the December 2011 offer, and their claims were exchanged for 5-year bonds valued at the prevailing market rate of 6 percent (IMF, 2012).

Due to a lack of fiscal discipline, Cote d’Ivoire also experienced a long-standing accumulation of domestic arrears (IMF, 2007; 2008; 2009). In November 2008, the government adopted a plan to clear between 2008 and 2010 all the outstanding arrears as of the end-2007. The plan, which combined cash payments and the

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163 The country defaulted on its external debt in January 2011 (Moody’s, 2017).
164 Despite the continuous roll-over of T-bills, the country maintained access to the regional market with longer maturities (IMF, 2011).
165 December 2011 is the distressed exchange date reported in Moody’s (2014).
166 This amount, equivalent to 5.4 percent of GDP, is computed using an exchange rate of 494 CFAF per U.S. $ (IMF, 2012). According to Moody’s (2013), the amount related to the episode is instead US$1.3 billion.
167 Interest rates offered were slightly below prevailing market rates (IMF, 2012).
168 The part residentially held was then 33 percent (IMF, 2011).
securitization of CFAF 41.6 billion of claims, prioritized the lowest claims and shorter maturity. Ten percent of the domestic arrears as of the end-December 2008 were cleared from January to February 2009, and another 47 percent was cleared from April to May 2009 (IMF, 2009; World Bank, 2009). Additional accumulation of unpaid claims did not allow Cote d’Ivoire to clear all its domestic arrears.\footnote{Even if no new accumulation of domestic arrears occurred in 2009, new claims were accumulated thereafter (IMF, 2010).}

After two audits conducted in 2012 and 2013, verified domestic arrears to suppliers amounted to CFAF 152.9 billion or US$ 321.46 million (IMF, 2013; 2013a).\footnote{U.S. dollar amounts are computed using an exchange rate of CFAF 475.64 per U.S. $. As the initial amount of arrears to suppliers before the two audits amounted to CFAF 356 billion, the audits resulted in the rejection of 57.1 percent of these arrears (IMF, 2013a). As reported by the IMF (2014), Cote d’Ivoire also accumulated CFA 247.7 billion of domestic arrears to the BCEAO.} According to the domestic debt clearance strategy, detailed on November 14, 2013, repayments started in December 2013 (IMF, 2013a).\footnote{Priority was given to small creditors (IMF, 2013a).} The plan featured three options: 1) immediate payment in cash with a 50 percent haircut; 2) payment over 3 years with a 30 percent haircut; 3) payment over 5 years with a 20 percent haircut (IMF, 2014a). In December 2013, CFAF 56.6 billion (US$ 119 million) of arrears to the non-banking sector were settled, of which CFAF 51.1 in cash. In September 2014, additional CFAF 27 billion (US$ 54.61 million) of arrears were settled with a 40 percent haircut. The government committed itself to clearing the remaining arrears by end 2014. In 2014, the government also promised to clear CFAF 12.8 billion of arrears to suppliers through cash payments and securitization (IMF, 2014).\footnote{We did not find any additional information regarding these arrears.} Arrears to the domestic financial sector, amounting to CFAF 142.1 billion (US$ 287.6 million), concerned long-standing arrears on securitized debt (IMF, 2014a). Authorities proposed to exchange them with new marketable securities in December 2015 (IMF, 2015a).
References


Moody’s (2013). Sovereign Default Series, pp. 8, October.

https://www.emta.org/WorkArea/DownloadAsset.aspx?id=8494


http://documents1.worldbank.org/curated/fr/86831468025498598/text/ICR10620P085831LIC0disclosed0816191.txt
Croatia (1992)

Framing the crisis

Following Croatia’s secession from the Socialist Federal Republic of Yugoslavia (SFRY) in October 1991, the banks lost access to the Yugoslavian central bank’s foreign exchange reserves (ECHR, 2013). As a result, the Croatian government had to transform foreign currency-denominated deposits into a public liability in 1992.173 At the same time the government also impose a deposit freeze of three years to stave off a bank runs.174 The freeze applied to both private and public banks, with public banks being the main players in the banking system at the time (IMF, 1998).

Details on domestic debt restructuring

The freeze commenced on December 31, 1991, and affected US$ 3.29 billion of foreign currency-denominated deposits, or 76 percent of debt held domestically (IMF, 2000).175 Depositors were only permitted to withdraw a maximum of DEM1000 per month.176 Simultaneously, the Croatian government changed the terms for deposits, establishing a 5 percent annual interest payment and, for principal repayment, 20 semi-annual equal instalments starting on June 30, 1995.177 The government offered bonds to pay for deposits, i.e. JDA, JDB, Bonds 93, Bonds 94-I, and Bonds 94-ii. These bonds were denominated in domestic currency, but indexed to German marks, and had the same maturity (10 years) and interest rate (5 percent) as the frozen deposits (European Commission, 2004; IMF, 2004; Mates, 2011).

Individuals also had the options to receive their deposits back at a 30 percent discount or exchange them for the same government bonds offered to banks, that could be used to purchase socially owned apartments or enterprises (IMF, 1998). Both options proved attractive to depositors and, by the end of the freeze in June 1995, the amount of frozen deposits had declined to US$ 2.16 billion by June 1995.178

To settle bad debts of state-owned companies and repay related arrears, the government issued US$ 1.5 billion of so-called big bonds in 1991 and 1992. These bonds did not pay interest, had 20-year maturities, and were

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173 Croatia only assumed responsibility on deposits of Croatian nationals who opted to transfer their foreign currency savings accounts in Croatian banks. See Official Gazette of Republic of Croatia 71/91. Croatia did not take responsibility for deposits in Ljubljanska Bank Zagreb, which it claimed should be refunded by the head office (Mozina, 2015).

174 See the decree law of December 23, 1991.

175 These deposits were mostly in resident households’ hands (Bubas, 1998; Mates, 2011).

176 This restriction did not apply to citizens living abroad (ECHR, 2011).

177 The change in the terms of deposits was retroactively effective from April 27, 1991 (IMF, 2000). Previous interest rates were often higher than 10 percent (ECHR, 2011).

178 the participation rate was 34.4 percent. The participation rate is computed as the difference between the original amount of frozen deposits (U.S. $3.29 billion) and their value in 1995 (U.S. $2.16 billion).
not traded. Principal repayments occurred in 40 semi-annual instalments, and nominal debts were revalued according to the Croatian industrial price index.\footnote{In addition, Croatia issued, through Decree No. 65/91, three reconstruction bonds in 1992 and 1993 to raise money for the reconstruction of the country. These bonds were denominated in DM, U.S. $, and Canadian and Australian dollars and paid slightly higher interest than the government bonds of Germany, Canada, the United States, and Australia. Tax relief was offered to purchasers (Bubas, 1998).}
References


Cyprus (2013)

Framing the crisis

In 2009, Cyprus experienced only a mild recession thanks to expansionary fiscal policies, which pushed the fiscal deficit up to 6 percent of GDP.\(^{180}\) By 2010, however, the country’s financial conditions had showed signs of a rapid deterioration (IMF, 2011a). Rolling over short-term debt became increasingly expensive due to widening sovereign spreads and the Standard & Poor’s downgrade in mid-November 2010 (Republic of Cyprus, 2011). In December 2011, the government signed an agreement with Russia for a €2.5 billion loan (amounting to 12.67 percent of GDP) at 4.5 percent interest to overcome the funding problems.\(^{181}\)

The banking sectors, that was heavily exposed to Greek government debt, became increasingly fragile, as the housing boom in Cyprus ended and the Greek recession deepened.\(^{182}\) Weaknesses in the banking sector spilled over to the rest of the economy, affecting private-sector consumption and investment. In 2012, the Cypriot banking system slipped into an even deeper crisis when the Greek government began restructuring its debt (Zenios and Panayi, 2015).\(^{183}\) At the time, the government’s fiscal position was also problematic. The fiscal deficit was roughly 6 percent of GDP, and government debt was on an upward trajectory, having increased from 53.4 percent to 79.4 percent from 2009 to 2012. Due to the lingering fiscal crisis, the government could not intervene to rescue banks and was left with no option, but to request financial assistance from the Eurogroup in June 2012 (IMF, 2013c).\(^{184}\) On April 26, 2013, Cyprus signed an agreement with the European Commission, the ECB, and the IMF to receive a €10 billion bailout to be disbursed between 2013 and 2016 amounting to 51 percent of Cyprus’ GDP (Moody’s, 2017).\(^{185}\)

As part of the agreement, the government decided on the resolution of Laiki Bank and the restructuring of the Bank of Cyprus.\(^{186}\) These banks were the two largest in Cyprus, accounting for 80 percent of the banking sector and holding assets valued at four times Cyprus’ GDP (European Commission, 2013). The Bank of Cyprus acquired assets and deposits below €100,000 as well as emergency liquidity assistance obligations from Laiki Bank, wiping out uninsured depositors, debt holders, and equity holders. The Bank of Cyprus was later

\(^{180}\) The stimulus was composed of permanent increases in wages and salaries amounting to 1.6 percent of GDP, social transfers amounting to 1.6 percent of GDP, and public investment amounting to 1.4 percent of GDP.

\(^{181}\) The Russian loan was restructured in 2013. The interest rate was lowered to 2.5 percent and maturity extended by two years (Reuters, 2013).

\(^{182}\) Banking-sector total assets, mostly financed by foreign depositors, amounted to 900 percent of Cyprus’ GDP in 2010 (Stephanou, 2011).

\(^{183}\) The Cypriot banking sector was exposed to both the public and private sectors in Greece, with large holdings of government bonds and loans (exposure amounted to 24 percent of GDP). The Greek restructuring imposed €4.5 billion of losses (Theophanous, 2013; IMF, 2011b).

\(^{184}\) The first agreement (March 16, 2013) signed by the Cypriot government and the Eurogroup, imposing a one-time bank levy of 6.7 percent for small deposits and 9.9 percent for large ones, was rejected by the Cypriot Parliament on March 19, 2013 (Brown, Evangelou, and Stix, 2017).

\(^{185}\) Finally, Cyprus received “only” €7.3 billion (€10 billion was the amount at disposal) as it exited the program early.

\(^{186}\) The government also used the contractual option to roll over the €1.9 billion Laiki recapitalization bond until 2014 (IMF, 2013b).
recapitalized through a partial bail-in from uninsured depositors (who suffered a 47.5 percent haircut) and a full bail-in from debt holders (Theophanous, 2013; Brown, Evangelou, and Stix, 2017; Cyprus Profile, 2014). These measures were accompanied by a two-week shutdown of the entire banking system and the introduction of capital controls (Brown, Evangelou, and Stix, 2017; Klein, 2018). As an additional part of the agreement, Cyprus also launched a restructuring program for domestic government debt in June 2013 (Cyprus Profile, 2013).  

**Details on domestic debt restructuring**

On July 1, 2013, Cyprus completed a pre-emptive voluntary debt exchange; 11 local law euro-denominated securities were exchanged for five new domestic tradable bonds (Republic of Cyprus, 2014). The restructuring exercise involved only domestic debt maturing from 2013 through the first quarter of 2016 held by residents, mostly large domestic banks (IMF, 2013a; Republic of Cyprus, 2014; S&P, 2013; European Commission, 2013).

The participation rate was 67 percent of the total affected bonds (€1.002 billion or US$ 1.33 billion) exchanged (Moody’s, 2017). New bonds had the same interest rates and nominal value (offer was par for par) but longer maturities (IMF, 2013c). The weighted average interest rate remained constant at 4.75 percent, while maturities were extended between three and eight years (Republic of Cyprus 2014; Moody’s, 2017). Moody’s (2017) estimates that the NPV loss for investors averaged roughly 47 percent.

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187 Domestic-law bonds involved were the so-called government registered development stocks (GRDS) that were bullet bonds scheduled to mature over the program horizon (European Commission, 2013; Republic of Cyprus, 2011).

188 The closing date for the exchange was set on July 1, as the deadline of June 30 fell on a weekend (IMF, 2013b).

189 U.S. dollar amounts are computed applying an exchange rate of €0.753 per US$ .

190 Collective action clauses were absent in old securities but were included in the new ones (S&P, 2013).
References


Democratic Republic of Congo (1997)

Framing the crisis

From the early 1990s, the Democratic Republic of Congo (DRC) faced a difficult economic and financial situation due to a combination of adverse domestic and external factors, such as economic mismanagement, political turmoil, and wars in neighboring countries (IMF, 2001). Despite real GDP growth averaged 6.6 percent in the 1990s, public finances were constantly in deficit. Amid growing deficits and negative profits of public enterprises, the government accumulated domestic arrears from 1997 (IMF, 2001).191

Details on domestic debt restructuring

The war that erupted on August 2, 1998, plundered the natural resources, caused millions of deaths and displaced the population, and destroyed the physical infrastructure. The fragile economic situation of the DRC further deteriorated during the armed conflict, as did its fiscal situation (IMF, 2001). After the war end in July 2003, the transitional government of the DRC came into power and started addressing some of the economic weaknesses.

In September 2003, the government completed the first audit on domestic payment arrears to the private sector, accumulated from July 1, 1997 to December 31, 2001.292 According to the audit, certified arrears amounted to US$ 209 million (IMF, 2004a, 2004b).293 In February 2004, an additional audit identified supplementary government liabilities, and the stock of certified arrears increased to US$ 1.27 billion (around 12 percent of GDP), of which US$ 470 million concerned commercial debt (OECD, 2006; OGEDEP, 2001). In November 2005, the government entered into negotiations with private creditors regarding the terms of the repayment through Sterling Merchant Finance Ltd (IMF, 2006). The negotiations resulted in an average discount of 75 percent in present value terms for the claims involved (IMF, 2007).294

191 There is evidence of domestic claims, which were accumulated from the 1980s, but we did not find additional information on them (OGEDEP, 2009).

292 In October 2003, the government completed another audit concerning its cross arrears with public enterprises, which pointed out U.S. $642 million of unpaid claims, including wage payment arrears. The government decided to cancel these arrears, but to pay for its utility consumption and any services rendered starting January 1, 2004 (IMF, 2004a).

293 In January 2004, the government also created an Inter-ministerial Domestic Debt Committee (IMF, 2004a, 2004b).

References


Democratic Republic of Congo (2011)

Framing the crisis

Despite the 2009 global financial crisis, the macroeconomic performance of the DRC remained positive. Although the fiscal position improved through consolidation and debt relief, shortcomings in government budget plans and slippages related to security spending exerted pressure on the public coffer. Due to limited financing options and sluggish progress in mobilizing more domestic revenue, the DRC relied on domestic arrears accumulation to fund its deficit (IMF, 2013).

Details on domestic debt restructuring

An audit, completed in 2011, showed that by the end of 2011, potential arrears may have been as high as US$ 1.4 billion (7.9 percent of 2012 GDP). Most of these arrears had been incurred before the 2007 elections (IMF, 2009). Arrears included unpaid wages, payments owed to state owned enterprises, and contractors, and unpaid judgments and awards stemming from judicial decisions (IMF, 2013, 2014). Authorities planned to obtain a discount from creditors of at least 50 percent on outstanding claims (IMF, 2014).

As of 2018, total domestic arrears included reconciled, yet unpaid, domestic arrears amounting to US$ 1.87 billion (accounting for almost 60 percent of total domestic public debt), and other arrears amounting to US$ 1.21 billion mostly related to unpaid social security claims, unpaid judiciary rulings, unpaid transfers to provinces, and unpaid payments to suppliers (IMF, 2019).

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195 Not all the arrears identified in the initial audit have been certified (IMF, 2015).
196 Since there were still U.S. $3 billion of legacy arrears to be audited in 2018, we do not assign an end date to this episode (IMF, 2019).
References


Dominica (2003)

Framing the crisis

In the early 2000s, several external shocks reduced Dominica’s growth rate. Lower export revenues, dwindling tourism, and a sharp decline in investment triggered a contraction of GDP of roughly 9 percent from 2001 to 2002 (IMF, 2003). The resulting drop in government revenues together with a lack of control over expenditure led to a deterioration in public finances. From 1999 to 2002, the average deficit-to-GDP ratio stood at 7.1 percent, with the debt-to-GDP ratio increasing from 61.8 percent to 98 percent. Ultimately, the cost of servicing debt soared, and the country defaulted in July 2003 (Moody’s, 2017; Durant, 2012).

Details domestic debt restructuring

In December 2003, the government announced its intention to restructure both external and domestic debt (Durant, 2012). The final exchange offer was launched in April 2004, and the distressed exchange, which achieved an overall 72 percent participation rate, occurred two months later (Moody’s, 2017). The exchange affected US$ 65.58 million of domestic-law local-currency debt and US$ 52.02 million of external debt (of which US$ 33.3 million were denominated in dollars). Domestic debt instruments involved in the restructuring included US$ 32.29 million of debentures, US$ 11.84 million of loans and government-guaranteed loans, and US$ 21.44 million of arrears (IMF, 2005). External debt instruments included US$ 47.4 million of bonds and US$ 4.6 million of debentures.

Three new local currency-denominated bonds, issued under the law of Trinidad and Tobago, and paying a 3.5 percent coupon were offered to creditors:

1) a “long bond,” with a 30-year maturity and a 30-year grace period, exchangeable at par for existing claims (no discount on principal).
2) an “intermediate bond,” with a 20-year maturity and a 20-year grace period, exchangeable at a 20 percent discount of the principal.
3) a “short bond,” with a 10-year maturity and a 10-year grace period, exchangeable at a 30 percent discount (Durant, 2012; IMF, 2004; Moody’s, 2017)

Holders of short-term claims maturing on or before March 31, 2006, had the opportunity to exchange their claims for any of the three newly issued bonds. Conversely, holders of existing claims maturing after March

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197 The collapse/slowdown of the banana industry was the consequence of weak export prices, adverse weather conditions, and the phasing out of preferential access to the European Union market (IMF, 2002).
198 The government claimed it would have stopped the exchange if the participation rate had been lower than 66 percent (Dow Jones Newswire, 2004).
199 Own computations based on Commonwealth of Dominica (2004). Given the peg introduced in 1976, the exchange rate used for the conversion is 2.7 Eastern Caribbean dollars per U.S. dollar (IMF, 2004).
200 The suppliers tendered their claims in the government’s ongoing debt exchange offer (IMF, 2004).
201 Collective action clauses (CACs) were included in the newly issued bonds (Robinson, 2010).
31, 2006, could exchange their claims only for intermediate bonds or long bonds (Commonwealth of Dominica, 2004). The exchange excluded short-term Treasury obligations maturing in three months or less, overdraft lines with local banks, and new credits issued after December 17, 2003, (Commonwealth of Dominica, 2004; Dow Jones Newswire, 2004). Accrued interest was paid in cash (Dow Jones Newswire, 2004).

Government debt received a face value reduction, a maturity extension, and an interest rate cut from 6 to 11 percent to 3.5 percent.\textsuperscript{202} As the government placed strong emphasis on inter-creditor equity (Dow Jones Newswire, 2004), losses were fairly even across different instruments. Using a 9 percent discount rate, the NPV of the debt tendered for the short bond is estimated at around 49 percent, and the NPV of the debt tendered for the intermediate bond and the long bond is estimated at 48 percent (Commonwealth of Dominica, 2004).

\textsuperscript{202} Own computations based on Commonwealth of Dominica (2004).
References


Dominican Republic (1996)

Framing the crisis

The Dominican economy expanded at a rapid pace in the late 1990s, following the stabilization efforts and structural adjustments at the beginning of the decade (IMF, 1999). From 1996 the government began accumulating domestic arrears, due to the lack of transparency in the budgeting process and the lack of coordination between public agencies dealing with the revenue and spending sides.

In 1997, real GDP expanded 7.5 percent, and similar growth rates were expected in 1998. However, Hurricane Georges hit the island on September 22, 1998 causing severe destructions and a collapse of the economy. Hurricane damages were so extensive that the government had to seek support from the IMF and other official lenders. In an effort to regularize its outstanding stock of domestic arrears, starting from 1998, the government passed several laws to convert unpaid domestic claims with suppliers, commercial creditors, and domestic banks into bonds (IMF, 1998).

The domestic debt restructuring

As of June 1998, domestic arrears of the government amounted to RD$2.7 billion (US$ 174.98 million or 1 percent of GDP). In the same month, the government transformed the debt into certificates (Certificados de Reconocimiento de la Deuda Pública Interna, CRDPI) and assured claimants’ compensation by June 2000 (SEF, 2002). In line with the repayment plans, most of the debt was settled through land-for-debt swaps (using lands provided by the state sugar company, CEA). The small remaining part was subject to monthly buy back operations (IMF 1999).

In November 1999, the government enacted Ley No.104-99 sobre bonos, in which it recognized its inability to repay the stock of domestic debt inherited from the previous government that had been in power until 1996 (The Dominican Republic, 2018). The law consolidated domestic arrears into bonds and set the conditions to repay them over time (IMF, 1998; Melhado, 2003; Caribbean Update, 2006). Through Ley No.104-99, the Dominican Republic issued RD$5 billion (US$ 314.27 million) of local-currency bonds with a

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203 In 1993, the government recorded a 0.2 percent deficit-to-GDP due to an increase in public spending. By December 2003, external arrears had been accumulated. On February 14, 1994, the government signed an agreement to restructure about U.S. $1.1 billion (U.S. $780 million of principal and U.S. $300 million of past due interest) of external debt with commercial banks. The agreement was executed on August 1994 and it involved an upfront U.S. $172 million payment (IMF, 2005). We report this episode as it is not covered by Asonuma and Trebesch (2016).

204 In 1996, public deficit increase was mostly funded through domestic arrears (IMF, 1997).

205 The amount in U.S. dollar is computed by using the exchange rate of RD$ 15.43 per U.S. $.

206 CEA provided lands to the government in exchange for past government transfers to cover its operating losses (IMF 1999).

207 The first operations produced about 50 percent discount on the face value of the certificates (IMF 1999).
6-year maturity, a 4-month grace period, and a 7 percent interest rate payable quarterly.208 Those bonds were used to settle both outstanding domestic debt arrears with various creditors and suppliers until August 1996 (RD$4.5 billion or U.S. 282.84 million), and to compensate depositors of the financial and banking institutions in the liquidation process (RD$0.5 billion or U.S. 36.07 million).209 By end-2003, the outstanding amount of domestic liabilities that had been restructured into bonds (through the Ley 104-99) amounted to RD$1.2 billion (US$ 31.42 million) (SEF, 2003).210,211 While quarterly interest payments related to these bonds were serviced (with occasional delays), principal repayment upon maturity (November 2005) was delayed due to administrative constraints. As the clearing and settlement system was not efficient enough to pay the large number of outstanding bondholders, authorities opted for a repayment schedule, which was spread over one month, and varied according to the series of bond (Business Wire, 2005).212

In 2002, a Comision Evaluadora de la Deuda Pública was established (decreto 582-02) to start the process of redeeming the remaining CRDPI, which expired in June 2000 and amounted to RD$137.4 million (US$ 8.10 million).213 In the same year, RD$11.5 million (US$ 0.678 million) of bonds issued before 2000 were repaid and the capitalized debt of various public companies, which amounted to RD$67.24 million, was transferred to the government (SEF, 2002).

In 2003, Ley No.172-03 authorized the government to issue additional RD$5.18 billion (US$ 291.67 million) in bonds to refinance the debt of some public companies (Diario Libre 2004).214,215 These bonds were

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208 The bonds could be used at maturity for payment of tax, fees, and contributions. Various additional laws and decrees governed the terms and timing of disbursements of domestic liabilities. We could not find the following legal texts: Ley 172-03 de Noviembre de 1999, Ley 183-02 de 21 de Noviembre de 2002, Ley 19-00 de Mayo de 2000, Decreto No. 489-96 de 7 de Octubre de 1996, Decreto 728-00 de Septiembre de 2000, Decreto 582-02 de 31 de Julio de 2002, and Decreto 1060-03 de 12 de Noviembre de 2003. Amounts in U.S. dollar are computed using an exchange rate of RD$ 15.91 per U.S. $.

209 Enforcement of new prudential rules, which started in 1991, brought to light pre-existing structural weaknesses in the financial system and resulted in insolvencies. Several institutions had to be liquidated in 1994 (IMF, 1995). Given the absence of protection for small depositors, the central bank took over assets and liabilities of the liquidated financial institutions. Small deposits were paid in cash while large deposits were exchanged for certificates with a maturity ranging from six months to four years (depending on the size of deposits), and a 10 percent interest rate (IMF, 1999). Amounts in U.S. dollar are computed using an exchange rate of RD$ 16.97 per U.S. $.

210 Around RD$3.8 billion in claims were disqualified (SEF, 2004). Additional claims amounting to RD$ 584.8 million (U.S. $18.83 million) were presented in 2004 and were admitted to the evaluation process through Act No.12, of June 9, 2004 (SEF, 2004).

211 Amounts in U.S. dollar are computed using an exchange rate of RD$ 35.06 per U.S. $.

212 The law detailing the issuance of these bonds did not explicitly mention a grace period (Business Wire, 2005).

213 The redemption process was still ongoing in 2004 (SEF, 2003; 2004). Amounts in U.S. dollar are computed using an exchange rate of RD$ 16.97 per U.S. $.

214 According to SEF (2003), in 2003 there was a debt restructuring of liabilities with Banco de la Reserva, which were consolidated into a new bond (RD$497.2 million) with lower interest and principal. Simultaneously, SOE debt transfers to the government continued.

215 Amounts in U.S. dollar are computed using an exchange rate of RD$ 17.76 per U.S. $.
subsequently restructured through *Ley No. 119-05* and *Ley No. 120-05* of April 2005, which also replaced part of the *Ley No. 104-99* bonds with ones of a longer maturity (SEF, 2004; 2005).\(^{216}\)

In the same year, the Dominican Republic restructured loans and credits provided by domestic banks. Out of the total amount of RD$16.46 billion (US$ 477.24 million), the government paid RD$7.71 billion.\(^{217}\) The remaining part was reprofiled by increasing the maturity to seven years and reducing the coupons. This led to savings of RD$300 million and US$ 85.2 million in principal, and RD$67.6 million in interest (SEF, 2005). As reported in the 2006 annual memory of the Dominican treasury (SEF, 2006), the country managed to get back on track with the payments of its liabilities in 2006.

\(^{216}\) According to *Ley No. 119-05*, RD$2.57 billion (U.S. $74.51 million) bonds were issued with 7 percent coupon and a 5-year maturity to pay back domestic arrears. *Ley No. 120-05* authorized the government to issue RD$1.88 billion (U.S. $54.51 million) bonds with a 20 percent interest rate payable every six months to redeem 50 percent of the bonds issued through *Ley No. 104-99* (SEF, 2005).

\(^{217}\) Amounts in U.S. dollar are computed using an exchange rate of RD$ 34.49 per U.S. dollar.
References


Ecuador (1997)

Framing the crisis

Despite the rapid economic expansion from 1990 to 1994, the Ecuadorian financial system was plagued by notable vulnerabilities. The banking sector remained especially fragile throughout the 1990s due to the lack of legal, supervisory, and regulatory frameworks. Lingering vulnerabilities led to a progressive loss of confidence in domestic financial institutions (Diaz-Cassou and others, 2008). In the first half of 1995, the country suffered from a combination of adverse shocks: a reduction in capital inflows triggered by the Mexican currency crisis, a conflict with Peru, and a drought-related power shortage. Central bank’s attempts to defend the exchange rate resulted in a liquidity crunch. Meanwhile, the government lost access to international financial markets and had to rely mainly on domestic sources to finance its debt (Sturzenegger and Zettelmeyer, 2007). Already in 1997, the government first re-profiled a small fraction of its debt (Moody’s, 2014; Sturzenegger and Zettlemeyer, 2007).

In 1998, the economy was put under additional pressure by declining oil prices and floods from El Niño, which resulted in damages amounting to 13 percent of GDP. In April 1998, the failure of Solbanco, a mid-sized financial institution, triggered a bank run (Jacome, 2004), nudging the Ecuadorian central bank to inject emergency liquidity assistance. The introduction of a financial transaction tax in December 1998 exacerbated the liquidity crunch, as it provided and incentive to households to increase cash holdings and for corporates to shift to cash holdings to offshore accounts. When Banco del Progreso, the second-largest bank, suffered a liquidity crisis in March 1999, the government declared a bank holiday and a freeze on deposits (Moody’s, 2008; Jacome, 2004). As a result, the payments system collapsed.

A run on the sucre (Ecuador’s currency) compounded Ecuador’s banking crisis, as capital fled the country and the U.S dollar replaced the local currency. The central bank’s attempt to defend the currency depleted its foreign reserves without stopping the depreciation (Ruiz-Arranz and Diaz-Cassou, 2018). In response to political pressures, authorities started unfreezing deposits in mid-1999 despite the lack of stabilization signs. Deposit runs resumed, restarting the vicious circle of bank failures, liquidity injections, and currency devaluation. Finally, the government lost access to international capital markets and suspended coupon payments on external debt in August 1999. The government communicated its intention to restructure all the external debt as well as a portion of the domestic debt in September 1999. In January 2000, the government officially dollarized the economy.

Details on domestic debt restructuring

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218 GDP growth averaged almost 4 percent per annum from 1990 to 1994.
219 Vulnerabilities included connected lending, off-balance sheet currency mismatches, and accumulation of non-performing loans.
220 The financial safety net only included central bank emergency assistance, which facilitated an increase in risky lending.
221 The government had introduced a Deposit Guarantee Agency in December 1998, providing an unlimited deposit guarantee. Through this agency, the public sector absorbed 14 banks (65 percent of the financial system) (Patino, 2001).
222 The sucre tumbled after the central bank abandoned the peg in February 1999, triggering a wave of insolvencies.
The government re-profiled domestic debt denominated in U.S. dollar in three waves: US$ 250 million were rescheduled in 1997, US$ 100 million in March 1998, and US$ 346.3 million in August 2000. The first two restructurings extended maturities by three years and seven years, respectively (Moody’s, 2014; Observatorio Latinoamericano de Geopolitica, 2008).

The restructuring in 2000, which was carried out within a week, affected U.S. dollar-denominated debt, corresponding to one-fourth of the total outstanding domestic debt (Banco Central de Ecuador, 2002; Moody’s, 2014). Only bonds maturing from October 28, 1999, to end-2000 were restructured (IMF, 2006). Local currency-denominated debt, including debt linked to the U.S. dollar, and longer-term dollar-denominated debt were not affected (Sturzenegger and Zettlemeyer, 2007). Local banks held US$ 208 million of the U.S.$346.3 million involved. The rescheduling that the government dictated extended maturities by seven years and reduced interest rates without changing the currency of denomination or reducing their face value. Old coupons ranging between 12 and 19 percent were converted to coupons paying 90 days LIBOR plus 2 percent. Additionally, they provided a two-year grace period (IMF, 2006). The resulting NPV loss was estimated to be similar for domestic and external instruments at below 40 percent (Sturzenegger and Zettlemeyer, 2007). The restructuring also involved a freeze on deposits, which occurred in March 1999. The freeze was partial for sight deposits and passbook savings, and complete for time deposits and certificates of deposit. The freeze lasted 12 months and involved US$ 3.7 billion, accounting for 58 percent of total outstanding deposits. Of the frozen deposits, 78 percent were U.S. dollar denominated and the rest were local currency denominated (Moody’s, 2008; de la Torre and others, 2001). US$ 460 million of frozen deposits were released from August 1999 to January 2000 (IMF, 2002). In March 2000, the government started implementing a general unfreezing scheme, which partially converted deposits into bonds. The unfreezing process ended when the last tranche of deposits was released in January 2001 (IMF, 2002). According to Moody’s (2008) and the IMF (2002), local currency deposits suffered from an 80 percent haircut, while a 12 percent haircut affected U.S dollar-denominated deposits.

In 1998, Ecuador also accumulated arrears with domestic suppliers and the social security system amounting to 2.1 percent of GDP (US$ 576.9 million) (IMF, 2000b, 2002). Significant improvements in the fiscal position reduced the outstanding stock of domestic arrears to US$ 85 million in December 2000 and to US$ 55 million in December 2001 (IMF, 2000a; 2001). In 2002, due to fiscal slippages, domestic payments arrears rose again to US$ 452 million, mostly related to wages and purchases of goods and services. According to the clearance

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224 According to Sturzenegger and Zettlemeyer (2007), the amount exchanged was around U.S. $500 million.

225 Given the unilateral nature of the rescheduling, we assign a 100 percent participation rate to the episode; Moody’s (2014) reports that the participation rate of the operation was “very high.”

226 According to Moody’s (2012), the NPV loss was smaller for domestic debt, at around 9 percent.

227 The freeze was accompanied by an automatic rescheduling of banks’ loans (de la Torre and others, 2001).

228 We do not have information regarding the residency of the holders.

229 According to the unfreezing scheme, deposits up to U.S. $4,000 were unfrozen, whereas larger amounts were forcibly exchanged for U.S. dollar-denominated bonds carrying a 7 percent interest rate (EFE News Service, 2000; Market News International, 2000; Moody’s, 2008).
plan the government approved in 2002, domestic arrears were to be cleared by 2003 through the issuance of
government debt (IMF, 2003a; 2003b).230

230 However, as reported by the IMF (2004), Ecuador accumulated additional arrears in the first half of 2004 due to liquidity problems. Information on the clearance date of these arrears remains elusive.
References


El Salvador (2017)

**Framing the crisis**

Before 2017, El Salvador had been running large fiscal deficits due to an increasingly costly pension system. While around half of the fiscal deficit had been spent on pension payments in the years preceding 2017 (IHS Global Insight Daily Analysis, 2017b), political polarization complicated the pension reform, severely limiting the government's financing options.

Political disagreement ultimately prevented the government from allocating funds to debt payments in its 2017 budget (ENP Newswire, 2018). As a result, in April 2017, the government missed a payment of US$ 28.8 million of Certificados de Inversion Provisionales (CIPs) to a local private pension fund (Fieser, 2017). CIPs were issued under domestic law and were held by private- and public-sector pension funds (Reuters, 2017b).

**Details of the domestic debt restructuring**

The value of the default soon rose to US$ 56.5 million thanks to delinquency penalties associated with the overdue US$ 28.8 million payment (IHS Global Insight Daily Analysis, 2017c). El Salvador resolved the US$ 56.5 million payment in May. Moody's classifies this episode as a foreign currency default, given the dollarization undertaken in 2001.

Faced with an impending US$ 91 million debt payment, El Salvador exchanged all existing CIPs for new ones on October 6, 2017 (ENP Newswire, 2018; Reuters, 2017b). This allowed the government to restructure US$ 5.97 billion in CIP debt through Salvadoran Congress Decree No. 789/2017 (Dow Jones Institutional News, 2017; Esmerk Latin American News, 2017). Under this decree, the US$ 91 million in accrued interest and amortization on CIPs, due in October 2017, were capitalized and added to the newly issued CIPs' notional values.231

The restructuring plan did not reduce the principal of the debt involved. Yet maturities were extended from 25 years to 30 years, with a three-to-five-year grace period (Reuters, 2017a; Dow Jones Institutional News, 2017). Additionally, coupon rates were lowered to 2.5 percent from the original level that ranged from 3.5 to 5.5 percent, with annual increases of 50 basis points reaching 4.5 percent through 2022 (Dow Jones Institutional News, 2017).

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231 This implied a change in the amortization schedule (Reuters, 2017a).

References


Framing the crisis

Following the collapse of Yugoslavia in 1991, the republics of Serbia and Montenegro established the Federal Republic of Yugoslavia (FRY), and the former National Bank of Yugoslavia (NBY) became the central bank of the FRY. In April 1991, the central bank dismissed and seized claims by other former-Yugoslav republics on US$ 12 billion of hard-currency deposits, mainly denominated in West German marks or U.S. dollars (Reuters, 1994; IMF, 1998; 2006; Baučić, 1972; Council of Europe, 2006). Out of the US$ 4.2 billion foreign-currency deposits held in the new FRY, 96.8 percent were held in Serbia, and 3.2 percent in Montenegro (Reuters, 1997, 1998a, 1998b, 1998c). In 1991, the federal government froze foreign-currency deposits paying an annual interest rate above 10 percent and suspended withdrawals in 1991 (European Court of Human Rights, 2011).

Details on domestic debt restructuring

In April 1997, the federal government started working on a program to repay deposits to its citizens by claiming that there was “no difference between those savings and country’s external debt” (Reuters, 1997).

Due to the extreme slowness of the federal government in dealing with the problem, the Montenegrin government decided to proceed on its own and, in April 1998, it announced a plan to start releasing frozen foreign currency deposits. According to the plan, repayment started on April 28 and deposits up to 500 German marks, which constituted 76 percent of total deposits, were to be repaid in full. Deposits ranging from 500 to 1,000 marks were to be repaid by June 15. Deposits exceeding 1,000 marks were set to be negotiated with local depositors’ associations and banks and negotiations were set to be completed by end-September 1998 (Reuters, 1998a; 1998b).

The federal government intervened later in the year through a decree-law and assumed as public debt all foreign currency savings of its own citizens held in its domestic banks (European Court of Human Rights, 2013; IMF, 2004). The legislation imposed a capitalization of interest based on a 2 percent annual interest rate and established an ambitious repayment schedule for these deposits to be concluded by 2012 (European Court of Human Rights, 2013).

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232 Due to the depreciation of the exchange rate, banks accumulated large losses on their foreign currency deposits, which were taken over by the SFRY. There was an unlimited guarantee for foreign exchange deposits with no specification of coverage, and there were no laws explaining any details on its functioning (introduced with legal amendments of the Law on Foreign Exchange Operations). See Mates (2011), Ognjenovic (2017), European Court of Human Rights (2011) and Council of Europe (2006).

233 The amount of deposits held in Montenegro was U.S. $134 million (Ministry of Finance of Montenegro, 2009). The governments of the countries emerging from the former Yugoslavia took over the blocked foreign currency deposits of their respective banks (Reuters, 1994).

234 Initially, citizens were allowed to withdraw up to 20 marks per month from the accounts. Later, this possibility was revoked (Reuters, 1994).

235 There were public banks (Jefferson Institute, 2005; IMF, 2002; 2006).

236 The federal government remained however the ultimate responsible for paying back those deposits.

237 Repayment terms differed depending on the type of deposit-holder (Central Bank of Montenegro, 2003)

238 All savings of citizens of the other SFRY successor States and all savings in branches of domestic banks located in those States remained frozen pending succession negotiations (European Court of Human Rights, 2013).
The total public debt absorbed through this law amounted to US$ 4.2 billion, equivalent to 35 percent of GDP in 2001 (IMF, 2004; Reuters, 2001a).

In January 2001, the federal government signed a decree-law creating special state bonds, the so-called frozen savings bonds, that were designed to replace frozen currency deposits (Reuters, 2001). Frozen saving bonds began to be issued in July 2001, were denominated in euros, and were of two types (Jefferson Institute, 2005; Reuters, 2001a; IMF, 2005a):


2. A seven-year B-bond, featuring a 2 percent annual interest rate and semi-annual payments (Reuters, 2001a, 2001b).

The bonds could be freely traded, though the secondary market was dormant, and were exempt from sales and capital gains taxes, and from payments operations fees. Bonds could also be used to purchase shares in local companies and banks, business premises, apartments, land, and other state-held property which were going through a privatization process. The bonds could also be used to pay sales taxes, excise duties, property tax, income tax or corporate tax (Jefferson Institute, 2005; Reuters, 1999; Ministry of Finance of Montenegro, 2007; 2010; Official Gazette No. 44/99). The 2001 decree-law allowed voluntarily swapping frozen foreign currency deposits for the frozen saving bonds (IMF, 2004; 2006; Reuters, 2001b, 2002). No deadline was set for the swap (Jefferson Institute, 2005). NPV losses due to the exchange were estimated at 11.5 percent (Flanagan, 2008).

Frozen saving bonds soon revealed a number of technical and practical flaws. The most problematic flaw was that bonds were created under overly optimistic growth assumptions that failed to realize (Jefferson Institute, 2005). Additionally, the repayment schedule implied a heavy burden on government finances starting

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239 The law set to pay the applicable domicile sight deposit interest for the period from 1 January 1993 to 3 July 1993, plus 6 percent annual interest as of 3 July 1993 (European Court of Human Rights, 2013). See the Law on Settlement of Obligations in respect of Foreign Currency Savings of Citizens (Official Gazette of FRY, No. 59/98).

240 See Official Gazette No. 59/98, 44/99 (Jefferson Institute, 2005).

241 See Official Gazette No. 53/01. In May 2001, the FRY completed repayments of the first 150 German marks to each holder of these deposits (Reuters, 2001; 2001a).

242 These bonds constituted the only bonds traded in the capital market (Central Bank of Montenegro, 2005). Each bond was set to mature on May 31 in the year of its maturity (Jefferson Institute, 2005).

243 Three series were issued: A2002, A2003, and A2004 (Jefferson Institute, 2005).

244 The government promised to recognize the nominal value of bonds instead of market prices achieved during these transactions.

245 In 2001, the National Savings Bank was established to provide services related to the conversion of foreign currency savings deposits into government bonds (Jefferson Institute, 2005).

246 As of November 2001, only 5 million marks of deposits had been exchanged for bonds (Reuters 2001b).

247 The non-electronic format of bonds produced problems for trading and clearing procedures (Jefferson Institute, 2005).
in 2005.\footnote{Debt servicing of those bonds were estimated at 328 million marks in 2001, 327 million marks in 2002, 366 million marks in 2003 and 428 million marks in 2004. Debt servicing costs were to be shared among governments and institutions. The FRY government covered 20 percent, Serbia 48.15 percent, Montenegro 1.85 percent, the central bank 15 percent, and commercial banks 15 percent (Reuters 2001a).} With the aim of correcting flaws and alleviating budgetary pressures, the government modified the original repayment schedule with a decree-law on July 2002, which limited payments to a certain percentage of GDP (Official Gazette of FRY, No. 36/02).\footnote{See the Law on the Settlement of the Public Debt of the Federal Republic of Yugoslavia Arising from the Citizens’ Foreign Exchange Savings (Official Gazette of FRY, No. 36/2002).}

According to the decree-law of July 4, 2002, existing A- and B-rated bonds were forcibly converted into “Series A” euro-denominated bonds amounting to euro 4.1 billion (US$ 3.86 billion) (FRY official gazette 44/2002, 2002; Jefferson Institute, 2005; Reuters, 2005b).\footnote{Bonds were issued in electronic format to avoid the difficulties experienced with the previous bonds (Jefferson Institute, 2005). Amounts in U.S dollar are computed using an exchange rate of Euro 1.062 per U.S dollar.} The new bonds were issued in 14 tranches under local law on a ‘one to one’ basis on August 19, 2002. They featured no coupon and maturities ranging from one year to 14 years (Emerging Markets Daily News, 2002; Reuters, 2002b).\footnote{Therefore, the law extended the original repayment schedule of frozen deposits from 2012 to 2016 (Jefferson Institute, 2005).} Smaller depositors were paid cash or through bonds with shorter maturities, while larger depositors were assigned bonds with longer maturities (Financial Times, 2002).\footnote{The program was structured to repay the savings under EUR 2,500 (around 90 percent of frozen savings) by 2006.} New bonds could be used as currency in privatization purchases and were accepted at their face value. Additionally, in the year of maturity, they could be used for tax payments (Emerging Markets Daily News, 2002).\footnote{The bonds were exempted from various taxes (Reuters, 2003).} With the aim of establishing a liquid capital market and a solid base for developing a bond market, the central bank allowed domestic banks to buy the new bonds from depositors and trade them in the secondary market (Financial Times, 2002).\footnote{In 2003, only few foreign currency savings bonds traded as retirees mostly held them (Dow Jones Capital Markets Report, 2003). To increase their liquidity, a part of those bonds was repackaged into EUR 30 million notes by Exotic Ltd. and ING (Dow Jones Capital Markets Report, 2003).}

The priority of the 2002 decree-law was to coordinate the bond maturity structure with budget income. In accordance with the financial assistance agreement negotiated with the IMF, the law limited annual payment to no more than 0.9 percent of projected GDP until 2010, compared with over 2 percent of projected GDP until 2011 under the original repayment schedule (IMF, 2004; Reuters, 2002a; 2002c).\footnote{The limit on debt servicing costs could be raised up to 1 percent of GDP until 2016, when the new bonds were due (Reuters, 2002a).}

Following the June 2006 referendum, Montenegro declared its independence (European Court of Human Rights, 2011; 2013). In April 2007, Montenegro decided to compensate confiscated foreign savings of its citizens deposited in banks outside Montenegro, which amounted to around euro 20 million (US$ 27.36 million) (Official gazette of the Republic of Montenegro No. 81/06, 20/07).\footnote{Previous compensations applied only to foreign savings confiscated by banks in Montenegro. The deadline for the submission of claims for foreign currency savings was set to January 6, 2008. Amounts in U.S. dollar are computed using an exchange rate of U.S. $1.368 per euro.} Repayment occurred through installment spreads from 2007 to 2017 (IMF, 2008). An additional euro 9.5 million (US$ 13.91 million) was recognized in
March 2008 and incorporated into the same repayment plan (Ministry of Finance of Montenegro, 2007, 2008a). At the time of writing, repayment was still ongoing (Ministry of Finance of Montenegro, 2020). In 2008, the Government also adopted a plan aimed at reducing internal debt, according to which it started to repurchase foreign currency savings bonds for 2016 and 2017 (Ministry of Finance of Montenegro, 2008a; 2010).

The episode also includes an accumulation of domestic arrears in the two Republics, mostly to pension funds. Available information remains elusive. In 2000, Serbia accumulated arrears, which amounted to US$ 948 million or 13.8 percent of GDP, while in 2005, Montenegro accumulated US$ 40.09 million or 2.1 percent of GDP (IMF, 2006a; 2009). To clear its arrears towards pensioners, the Serbian government decided to pay part in cash and part through the issuance of bonds according to a law approved in September 2005 (later amended in December). The first two tranches of arrears for the pension fund of employees were to be paid in December 2005 and July 2006 (IMF, 2006b). Notwithstanding the progress made throughout the years to improve fiscal discipline, Serbia kept accumulating domestic arrears, and as of 2020, it has not been able to clear them (IMF, 2020).

In Montenegro, the government agreed in 2007 with the Union of Pensioners to recognize liabilities amounting to euro 100 million (US$ 68.31 million) in respect of pension indexation due from 2002 to 2003 (IMF, 2009a). In June 2008, the parliament adopted a new law, which prescribed paying the liabilities in six semi-annual instalments from October 2008 through April 2011, through bonds paying an annual interest rate of 2 percent (Ministry of Finance of Montenegro, 2009). The bonds, issued in August 2008, and amounting to euro 105 million, were not subjected to compensation of property tax and capital gains, and could be used to pay electricity bills or taxes, purchase shares of state enterprises, apartments, residential premises, business premises, land, or other property owned by the state (IMF, 2009a; Ministry of Finance of Montenegro, 2010; 2011; 2012). Pensions arrears decreased from euro 48.5 million in 2009 to euro 1.8 million in 2012 (IMF, 2010). Montenegro kept accumulating domestic arrears. As of 2020, pensions arrears amounted to euro 1.91 million (Ministry of Finance of Montenegro, 2020).

Montenegro also accumulated domestic arrears on restitution claims for properties expropriated by the former communist government (IMF, 2006b; 2010). To repay these claims, of which the amount remained unknown for several years, the Montenegrin government adopted a Restitution Law in March 2004, which detailed a process of determining the claims, establishing and financing Compensation Funds, and issuing restitution

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257 See Official Gazette RCG, no. 21/08, which came into force on 4 April 2008. Amounts in U.S dollar are computed using an exchange rate of U.S. $1.464 per euro.


259 On April 8, 2005, Serbia exchanged its old external debt with the London Club for a new 20-year U.S. $1.02 billion Eurobond (Reuters, 2005a). To the best of our knowledge, no other existing database covers this episode.

260 Amounts in U.S dollar are computed using an exchange rate of U.S. $1.179 per euro.

261 In August 2008, an additional euro 105 million (U.S. $71.72 million) of pension arrears were accumulated, stemming from July 2002 and December 2003, which were cleared through the issuance of bonds in September 2008 (IMF, 2009a; Ministry of Finance of Montenegro, 2010).
bonds (Central Bank of Montenegro, 2007; Ministry of Finance of Montenegro, 2009). In March 2006, the government issued non-interest bearing bonds amounting to euro 150 million (US$ 120.61 million) (Central Bank of Montenegro, 2007; State of Montenegro, 2019). The Parliament limited the overall liabilities stemming from restitution to a maximum of 10 percent of GDP through amendments to the Restitution Law to limit the fiscal risks from restitutions (IMF, 2008).

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262 Preliminary estimates exceeded euro 1 billion (U.S. $805.34 million) (Ministry of Finance of Montenegro, 2009).

263 These bonds could be used for buying stocks or shares and other property of the Republic of Montenegro and state funds. Amounts in U.S. dollar are computed using an exchange rate of U.S. $1.243 per euro.
References


http://pdc.ceu.hu/archive/00003898/


https://mif.gov.me/en/sections/other/112271/STATEMENT.html


Framing the crisis

Fiscal revenues in Gabon heavily relied on the oil sector (IMF, 2006). Increasing government expenditures led to widening fiscal deficits, which were funded with domestic and external debt as well as domestic arrears. The debt-to-GDP ratio increased from around 30 percent in 1970 to almost 86.5 percent in 1997 (IMF, 2002a). In 1997, Gabon lost access to international financial markets and began accumulating arrears on its external debt and with the domestic financial system (IMF, 2002c; OECD, 2002a, 2002b; UNPD, 2006; World Bank, 2003).

Details of domestic debt restructuring


264 U.S. dollar amounts are computed using an exchange rate of CFAF 562.21 per U.S. dollar.
References


Gabon (2001)

Framing the crisis

Gabon’s economy continued facing major challenges, which included a protracted decline in the world oil price at the end of the 1990s (IMF, 2004b). Despite efforts to strengthen government expenditure control, the deficit widened, and refinancing needs increased. Ultimately, the government again started accumulating arrears on its external debt and with the domestic financial system (UNPD, 2006).

Details of domestic debt restructuring


Gabon also featured large and longstanding domestic arrears toward suppliers and employees, that had been accumulating from 1995. In 1995, those arrears amounted to CFAF 39.8 billion (US$ 22.48 million) and they peaked at CFAF 102.4 billion (UNPD, 2006). In 1999, the Gabonese government launched two new public finance audits for 1997 and 1998 as well as a separate audit for domestic public debt (African Development Bank, 2001; IMF, 2000). As a result of the audit, the government revised its estimates for outstanding domestic public debt at end-1998 to CFAF 399 billion (US$ 611.07 million), down from the initial estimate of CFAF 746 billion (IMF, 2000; Soderling, 2002). Legitimate claims on the government were first regularized through new commercial agreements with domestic creditors (securitization) and then integrated into domestic debt (IMF, 2000, 2002a, 2002b). Around mid-2000, authorities signed the so-called conventions moratoriees, which rescheduled arrears over eight-year to domestic suppliers amounting to CFAF 180.4 billion (US$ 254 million). In 2001, new debt amounting to almost CFAF 36.79 billion (US$ 49.43 million) or 1 percent of GDP was identified and brought in under the same conventions (IMF, 2002b).

Domestic arrears continued to accumulate over time. In 2004, the government adopted a strategy to settle remaining domestic arrears through several clearance operations. In February 2004, domestic creditors formed the Libreville Club, an association between the state and the employer group Confédération patronale gabonaise (Economist, 2014). The objective of the association was to have a single representative for the creditors, who was responsible for negotiating the repayment of outstanding government commitments until

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265 U.S. dollar amounts are computed using the exchange rate of CFAF 744.31 per U.S. dollar in 2001, CFAF 625.5 per U.S. dollar in 2002, CFAF 519.36 per U.S. dollar in 2003.

266 As reported by the IMF, Gabon started recording domestic arrears related to back pay (rappels de salaires) accumulated from 1977 due to lengthy administrative procedures (IMF, 2001; OECD, 2002b).

267 U.S. dollar amounts are computed by using an exchange rate of CFAF 562.21 per U.S. dollar.

268 The 1999 audits, an international consultancy firm conducted, identified systematic over invoicing and fictitious invoices by domestic, foreign-owned enterprises (IMF, 2002b, 2004b).

269 U.S. dollar amounts are computed by using an exchange rate of CFAF 652.95 per U.S. dollar.

270 According to the IMF (2002b), domestic arrears amounted to 5 percent of GDP. The GDP at current prices was CFAF 3,608 billion in 2000. Arrears are computed using an exchange rate of CFAF 710 per U.S. dollar in 2000 (IMF, 2002a).

271 U.S. dollar amounts are computed by using an exchange rate of CFAF 744.31 per U.S. dollar.
December 31, 2002. All creditors with claims exceeding CFAF50 million (US$ 95,000) could participate in
the Club. Negotiated government repayments were set to be distributed among the Club members according
to the size of their claims (Markit, 2004; OECD, 2005). Under these terms, Gabon signed the first agreement
with the Libreville Club in March 2004, which was divided into two phases: Club de Libreville I and Club de
Libreville II (starting in April 2004). The agreement involved claims amounting to CFAF 38.9 billion (US$ 73.6 million). These claims were made up of unpaid payment orders (called treasury float), and arrears on
the domestic debt obligations recorded at the Directorate General of Public Accounting (OECD, 2005). With the agreement, suppliers received negotiable securities in exchange for their claims, which featured a 7 percent interest rate and an 18-month maturity. Several suppliers sold their securities to domestic banks at a
negotiated discount to get immediate liquidity (IMF, 2005a, 2005b, 2005c).

The treasury reopened membership to the Club several times in the years that followed. In January 2005,
parties signed another agreement (Club de Libreville III), which rescheduled a further CFAF 17.4 billion (US$ 33.04 million) of domestic debt (IMF, 2005a, 2005b, 2005c). In early 2007, Gabon concluded another
agreement (Club de Libreville IV) on the rescheduling and settlement of long-standing claims (IMF, 2007). In September 2010, the government signed another agreement with the Libreville Club (Club de Libreville VI). Parties agreed to replace CFAF 181 billion (US$ 368.7 million) of outstanding claims with securities featuring
a 4 percent interest rate, and a 48-month maturity. The agreement involved only claims exceeding CFAF
100 million and contracted before 2010 (All Africa, 2012; Apanews, 2010; Agence France Presse, 2010; OECD,
2012). Outstanding arrears at end-2009 were consolidated in the Club de Libreville VI. As a result, as of end-
2010, the outstanding amount of arrears only consisted of payment vouchers for 2010 and amounted to CFAF 68 billion (World Bank, 2012).

In 2017, the government adopted a strategy to clear its domestic arrears by spreading their repayments over
several years (IMF, 2017a). As of December 2017, domestic arrears amounted to 5.3 percent of GDP (U.S.$ 840.4 million), out of which 0.5 percent of GDP referred to domestic debt service, 3.8 percent of GDP to VAT refunds, and 1 percent of GDP to unpaid treasury float (IMF, 2018). According to the strategy, the debt repayment schedule ranged from two to four years (IMF, 2017b).

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272 See UNPD (2006) for more details on the eligibility criteria for credits under the Libreville Club I.

273 In case the government did not honor its debts, the Club members could discount these from corporate tax payments (Markit, 2004; UNPD, 2006).

274 U.S. dollar amounts are computed using an exchange rate of CFAF 528.3 per U.S. dollar in 2004 (IMF, 2005a).

275 Treasury float refers to “payment orders at the treasury” and “other treasury float.” The first is the difference between cumulative payment orders (ordonnancements) and cumulative actual payments (checks encashed - cash basis). The second includes accounts on subsidies, consignments, accounting agencies, and installments to be allocated (IMF, 2001, 2004a).

276 During the first nine months of 2004, local commercial banks bought around CFAF7.8 billion of securitized commercial agreements from private nonbank creditors (IMF, 2005b).

277 U.S. dollar amounts are computed using an exchange rate of CFAF 526.6 per U.S. dollar in 2005 (IMF, 2007).

278 U.S. dollar amounts are computed using an exchange rate of CFAF 490.91 per U.S. dollar.

279 U.S. dollar amounts are computed using an exchange rate of CFAF 546.95 per U.S. dollar.
In April 2018, the government decided to implement another payment plan with the Club of Libreville (Club de Libreville VII) to deal with claims lower than CFAF 2 billion (L'Ombre, 2018). Outstanding domestic arrears were consolidated in the agreement (IMF, 2018). Parties agreed to exchange CFAF 285.7 billion (US$ 498.7 million) for securities featuring a 5.5 percent interest rate and a 74-month maturity (IMF, 2018). Under the terms of the agreement, the Gabonese government agreed to pay CFAF 5 billion per month (IMF, 2019). In exchange, creditors committed to reinvest part of the money received into the Gabonese economy to support its development (Agence Ecofin, 2018).

280 Creditors were coordinated by BGFI Bank.

281 U.S. dollar amounts are computed using the exchange rate of CFAF 572.89 per U.S. dollar.

282 The aim was to replace outstanding claims with marketable securities able to improve the cash flow position of small- and medium-sized enterprises' (IMF, 2018).
References


The Gambia (2017)

Framing the crisis

From 2016 to 2017, the Gambia only had a short rainy season and suffered from the effects of the Ebola crisis. Given the reliance on the agricultural sector, GDP growth fell from 4.1 percent in 2015 to 1.9 percent in 2016. The eruption of a political crisis in late 2016 aggravated the economic situation. In particular, it negatively affected the tourism sector, which accounted for one-fifth of GDP (IMF, 2017; World Bank, 2018b, 2018c).283

In December 2016, the election of President Barrow not only ended President Jammeh’s 22-year rule, but also marked the first democratic change since its independence. Weak institutional capacity placed the newly elected government in a difficult situation (IMF, 2018a; World Bank, 2018a, 2018b). Lack of control over public expenditure and a mounting wage bill significantly weighed on the country’s fiscal position. Fiscal deficits were funded from domestic borrowing, money printing, arrears accumulation, and the issuance of short-term Treasury bills.284 As a result, public debt and domestic debt service obligations had built up rapidly built-up (Central Bank of the Gambia, 2017).285 Further budgetary pressure came from loss-making state-owned enterprises (SOEs), primarily from the National Water and Electricity Company (NAWEC), that had to be bailed out.286 Following the bail out of SOEs, the public debt peaked at 129 percent of GDP in 2017 (IMF, 2017; Ministry of Finance and Economic Affairs, 2019).287

With the support of the IMF and the World Bank, the new administration committed to restoring debt sustainability through cutting expenditures, raising revenues, and reducing excessive domestic borrowing. The government approved a new medium-term debt strategy (MTDS), which aimed to reduce domestic borrowing, extending maturities, and lowering interest costs on domestic debt (Central Bank of the Gambia, 2017; IMF, 2017, 2018a).

Details on domestic debt restructuring

The NAWEC first defaulted on its debt service obligations at end-2016. Its debt, which had been consolidated in a five-year government-guaranteed bond (the “NAWEC bond”) in 2014, amounted to around GMD 1.83 billion (US$ 0.042 billion) as of 2016 (IMF, 2017, 2018c; World Bank, 2018a, 2018b, 2019).288 The government took up the debt servicing of that bond and included the payment due in its 2017 budget (IMF, 2018c; World Bank, 2018a).

283 Political uncertainty slowed tourist arrivals by 20 percent (World Bank, 2018b).
284 Available information on domestic arrears dates back only to 2014 (IMF, 2017).
285 In 2016, domestic debt service absorbed 42 percent of government revenue, with public debt seven times that of government revenues (Credendo 2018, IMF 2017).
286 Previously, the NAWEC was subjected to presidential directives that set electricity tariffs below cost recovery and imposed unviable projects in rural areas. Additionally, a monopoly supplier associated with the former president inflated fuel supply costs (IMF, 2017).
287 The new administration uncovered the previous regime’s theft and embezzlement of funds from SOEs. Findings by the Finance Ministry suggested a theft of state resources in the order of 4 percent of GDP per year from mid-2014 (Government of the Gambia, 2017).
288 The U.S. dollar amount is computed by using the exchange rate of GMD43.89 per U.S. dollar.
In June 2017, authorities approached five domestic banks holding the NAWEC’s debt to negotiate a maturity extension (IMF, 2018a). The parties agreed to extend the bond maturity by seven years in August 2017 (Ministry of Finance and Economic Affairs, 2019a; IMF, 2018c; World Bank, 2018a).289

Later, in March 2018, the government took over a large part of the debt owed by the NAWEC under a Memorandum of Understanding signed between the Ministry of Finance and the World Bank. Regarding the domestic part, the government assumed a government-guaranteed domestic bond amounting to GMD 1.7 billion (4 percent of GDP), capitalized government loans to the NAWEC of GMD 2.6 billion, and two unsecured local currency-denominated loans owed to the Social Security and Housing Financing Company (SSHFC) amounting to GMD 0.8 billion. Regarding the external part, the government assumed guaranteed external loans amounting to GMD 2.1 billion (IMF, 2018a, 2018b; World Bank, 2018b, 2019). According to the IMF (2018a), all domestic debt was denominated in Gambian dalasi.

The Gambia also obtained relief on its official debt. In late 2017, China provided full debt forgiveness on around U.S.$14 million of debt contracted in the 1980s and, in early 2018, the Saudi Fund for Development agreed on rescheduling U.S.$34 million of principal payments, falling due from 2018 to 2021, by 15 years (World Bank, 2019).

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289 Additional domestic debt restructuring occurred at end-2016 when all outstanding lending received from the central bank, and amounting to GMD 10.78 billion, was consolidated into a 30-year bond paying a 5 percent interest rate (IMF, 2017). On August 27, 2018, the central bank and the government agreed to increase the interest rate on the bond from 5 percent to 7 percent (IMF, 2019).
References


Greece (2011)

Framing the crisis

From 2000 to 2009, the economy grew strongly with a boom in domestic demand (mainly driven by consumption and residential investment), and flourishing credit growth on the back of low interest rates and loose fiscal policies. Despite the rapid growth, Greece systematically missed its fiscal targets starting in the early 2000s due to overspending, widespread tax evasion, and overoptimistic tax projections (EC, 2010).

In October 2009, the newly elected Greek government revealed that the country had underreported its debt and deficit data for several years as a result of major deficiencies in accounting and statistical systems. The deficit peaked at 15.75 percent of GDP, and government debt-to-GDP at 129.3 percent in 2009 (EC, 2012a). Confidence dropped and the markets started fretting about fiscal sustainability (EC, 2010).

Spreads between Greek and German 10-year bonds peaked at 900 basis points in April 2010, impeding market access and “forcing” the government to seek official assistance from euro-area countries and the IMF. The agreement signed on May 2, 2010, featured a comprehensive package of policy measures supported by €110 billion in financial assistance to be released from May 2010 to June 2013 (EFSF, 2012a). Euro-area countries provided €80 billion as bilateral loans (the so-called Greek Loan Facility), and the IMF €30 billion as a Stand-By Arrangement (EC, 2010).290

Several factors hampered the implementation of the first adjustment program, including political instability and a deeper-than-expected recession (EC, 2012a).291,292 After rejecting a new financing proposal on July 21, 2011, the Euro Summit invited "Greece, private investors and all parties concerned to develop a voluntary bond exchange with a nominal discount of 50 percent on notional Greek debt held by private investors" on October 16, 2011. The Eurogroup finally approved the second economic adjustment program on February 21, 2012 (EC, 2012b). Euro-area countries and the IMF committed to providing the unreleased amounts from the first program, and an additional €130 billion from 2012 to 2014 (EC, 2012a).293 This time, euro-area countries agreed to finance the second program through the European Financial Stability Facility (EFSF).294 Additionally, Greece committed to implementing a sovereign debt restructuring (Eurogroup, 2012; Hellenic Republic Ministry of Finance, 2012a).

Details on domestic debt restructuring

290 The loan received was €2.7 billion lower, as Slovakia withdrew its participation, and Ireland and Portugal withdrew as guarantors.

291 The economy contracted as consequence of withering domestic demand and net exports (EC, 2012a).

292 On June 2, 2011, the IMF concluded a review on Greece, which found that without additional official financing, a debt restructuring of privately held claims would be necessary (Zettelmeyer and others, 2013).

293 The second program amounted to €164.5 billion until the end of 2014, of which the EFSF released €141.8 billion.

294 The EFSF became operational in August 2010.
On February 24, 2012, Greece launched an exchange offer for €205.6 billion face value amount of outstanding bonds. The exchange took place on March 9 for the domestic law bonds (Zettelmeyer and others, 2013), and on April 20 for foreign law bonds (EC, 2012a).

Bondholders received:

1) New foreign law bonds with a maturity from 2023 to 2042, an increasing coupon structure, a face value of 31.5 percent of the old face value of the bonds, and collective action clauses.

2) 2013 and 2014 EFSF notes featuring a face value of 15 percent of the old face value of the bonds and a fixed interest rate (0.4 percent for the 2014 EFSF notes and 1 percent for the 2013 EFSF notes).

3) six-month zero-coupon EFSF notes, delivered on the settlement date, to clear all the unpaid interest accrued on exchanged bonds up to February 24.

4) detachable GDP-linked securities, featuring a notional amount equal to the face amount of each holder’s new bonds. This gave creditors the possibility of receiving an extra payment of up to 1 percent of the face value of the outstanding new bonds, in case the GDP was larger than a specified target (EC, 2012a; Hellenic Republic Ministry of Finance, 2012a).

The restructuring exercise involved both domestic and foreign law debt (Hellenic Republic Ministry of Finance, 2012b). Out of the €205.6 billion (U.S.$ 270.53 billion) in eligible bonds, €199.21 billion was restructured with the following breakdown: €183.85 billion (U.S.$ 241.91 billion) of domestic law bonds and €15.36 billion of foreign law bonds (EC, 2012b; Zettelmeyer and others, 2013). In particular, to ease the restructuring process for the Greek law bonds, the government retroactively inserted collective action clauses (CACs) into its outstanding domestic law bonds through the Greek Bondholder Act, 4050/12 on February 23 (EC, 2012a). These clauses allowed the restructuring of the entire stock of debt with the approval of a qualified majority (50 percent of face value and a consent threshold of two-thirds of the face value taking part in the vote). As a result, the participation rate was 100 percent for domestic law government bonds. The restructuring exercise also involved 22 sovereign-guaranteed bonds issued under domestic law and euro denominated (Zettelmeyer and others, 2013). Out of the original amount of €6.7 billion, €6.54 billion (U.S.$ 8.60 billion) was

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295 Greece extended the deadline twice for bonds issued under foreign law and for bonds issued by state enterprises and guaranteed by Greece (EC, 2012a; Hellenic Republic Ministry of Finance, 2012c).

296 Coupons were set at 2 percent until 2015, 3 percent until 2020, 3.65 percent until 2021, and 4.3 percent thereafter. Interest accrues started from February 24, 2012 (Hellenic Republic Ministry of Finance, 2012a; Zettelmeyer and others, 2013).

297 Greece did not deliver EFSF notes to bondholder resident in the United States, who instead received the proceeds realized from the sale of the EFSF notes they were supposed to receive in cash (Hellenic Republic Ministry of Finance, 2012a).

298 In case of increases of the Greek nominal GDP above a specific threshold, and of a positive real GDP growth larger than specified targets, the GDP-linked securities were set to pay up to 1 percent of their notional amount annually (starting from 2015) (EC, 2012a). The face value of the GDP-linked securities was set to be reduced by about 5 percent per year from 2024 to 2042 (Zettelmeyer and others, 2013).

299 Amounts in U.S. $ are computed using an exchange rate of EUR0.76 per U.S.$.

300 All Greek law bonds that had been issued or guaranteed by the state before December 31, 2011, fell within the scope of the new law (EC, 2012a; Zettelmeyer and others, 2013). On February 27, Greece was downgraded to Selective default by Standard & Poor’s.

301 Several sovereign-guaranteed loans and bonds were not included in the exchange, but information on these guarantees has been difficult to find (Zettelmeyer and others, 2013).

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restructured, with a participation rate of 97.6 percent.302 Greece restructured €15.36 billion of foreign law bonds out of the eligible €21.61 billion. Holdouts amounted to €6.41 billion, of which €160 million related to a sovereign-guaranteed bond (Zettelmeyer and others, 2013).

Only privately held bonds, issued before 2011, were involved in the exchange. Around 50 percent were held domestically (Hellenic Republic Ministry of Finance, 2012a).303 The offer excluded bonds held by the ECB, the largest creditor of Greece with a €42.7 billion exposure as of February 2012. Bonds held by national Central Banks and by the European Investment Bank were also excluded (Zettelmeyer and others, 2013).

The restructuring exercise achieved a 53.5 percent reduction of the face value, and the extension of the maturities (Zettelmeyer and others, 2013). Before the restructuring, residual maturities of eligible bonds had ranged from almost zero (March 20, 2012) to 45 years, with the bulk of Greece’s old bonds set to mature from one to eight years (Zettelmeyer and others, 2013). New bonds shifted maturities of one to two years forward for around 15 percent of the face value of the old debt and of up to 30 years for 31.5 percent of it (Zettelmeyer and others, 2013). Coupon rates were reduced from around 4 to 6 percent to 0.4 to 1 percent for the EFSF Notes, and to 2 - 4.3 percent for the new government bonds (Zettelmeyer and others, 2013).

Estimates of NPV losses range from 33.7 to 78 percent, with short-term bonds suffering larger haircuts than longer-dated bonds (Zettelmeyer and others, 2013). Estimates for NPV losses on sovereign-guaranteed bonds range from 35.5 to 77.3 percent.304

In the second half of 2012, domestic demand contracted sharply. The deteriorating macroeconomic environment together with delays in implementing the program worsened debt sustainability outlook compared to March 2012 (EC, 2012b). The projected debt-to-GDP ratio for 2020 rose 11.5 percentage points above the level that had been predicted at the beginning of the year (EC, 2012b). At the Eurogroup meetings on November 26 and 27, euro-area countries agreed on measures aimed at ensuring sufficient financing for implementing the program and strengthening the debt sustainability (EC, 2012b). Among the measures, parties agreed on a reduction of the Greek Loan Facility’s interest margin and of EFSF’s loans (together with a deferral of EFSF interest rate payments), a maturity extension of the Greek Loan Facility, and a debt buyback operation (Hellenic Republic Ministry of Finance, 2012d).305

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302 The sovereign-guaranteed bonds, which corresponded to U.S.$8.18 billion, were issued by public enterprises such as Railways, Defence Systems, and Athens Public Transport. These guaranteed bonds were not included in the Greek bondholder law that “retrofitted” CACs on all sovereign bonds issued under Greek law. As a result, there was a €160 million holdout on an Athens Urban Transport bond of €320 billion in face value (Zettelmeyer and others, 2013).

303 Main creditors were banks with 23 percent of bonds holding, the SSF with 13 to 14 percent, and Pharma with 5 percent (based on information received by the Greek PDMA).

304 These values are computed using the imputed yield curve in Zettelmeyer and others (2013).

305 Euro-area countries agreed to reduce the interest rate of the Greek loan facility, lower the guarantee fee costs, extend the maturities, and defer Greece’s interest payments by 10 years.
The bonds that the buyback operation targeted were those that had been issued nine months earlier (called nGGBs), which were trading at a large discount (Zettlemeyer and others, 2013).\textsuperscript{306} Greece concluded the buyback on December 18, 2012, at an average price of 33.8 percent of the nominal value (Hellenic Republic Ministry of Finance, 2012g). In the operation, Greece bought back €31.9 billion of Greek bonds (Hellenic Republic Ministry of Finance, 2012c, 2012f) using €11.29 billion from EFSF financing (in the form of six-month zero coupon ESFS notes). As a result of the operation, the face value of Greece’s debt fell by €20.61 billion (Zettlemeyer and others, 2013; EC, 2012b). Depending on the discount rate used, the operation produced a present value debt relief ranging from €12 billion to €21 billion (Zettlemeyer and others, 2013).

\textsuperscript{306} Before the buyback, GGBs amounted to EUR 62 billion. These included EUR 15 billion held by Greek banks and EUR 8 billion held by Greek pension funds (EC, 2012b).
References


Grenada (2004)

Framing the crisis

A series of shocks in the early 2000s, such as the decline of tourism due to the September 2001 terrorist attacks and the damages to infrastructure brought by Tropical Storm Lili, triggered a recession in Grenada (IMF, 2005b). To stimulate growth, the Grenadian government adopted expansionary fiscal policies, which increased debt-to-GDP ratios sharply, soaring from 35 percent in 1999 to 80 percent in 2002 (Asonuma and others, 2017). Fiscal finances further deteriorated in September 2004 when Hurricane Ivan caused damages estimated at US$ 900 million (around 200 percent of GDP). With public debt peaking at 130 percent of GDP in October 2004, the government announced its intention to restructure both external and domestic debt. As a result, Grenada ceased servicing all of its external bonds and most of the domestic one, but it continued to service domestic loans and treasury bills. In September 2005, the government announced an exchange offer (Moody’s, 2014), and executed it on November 15, 2005 (Moody’s, 2017).

Details on domestic debt restructuring

The restructuring involved US$ 86 million of domestic claims (IMF, 2006). US$ 5.5 million was denominated in U.S. dollars, and the remaining US$ 80.5 million in Eastern Caribbean dollars (EC$). The U.S. dollar-denominated claims included one bond with a US$ 5.5 million face value, a 7.5 percent coupon, and a 10-year maturity. The Eastern Caribbean dollar-denominated claims included several bonds amounting to US$ 62.6 million, six bank loans amounting to U.S $14.9 million, and one guaranteed claim of US$ 2.1 million (IMF, 2006; Moody’s, 2017). Domestic bank loans were restructured pre-emptively. Instead, both U.S. dollar-denominated and Eastern Caribbean dollar-denominated claims were restructured after default and the exchange offer included the capitalization of past-due interests, which had accrued in the 10 months between the default and the restructuring (Asonuma and others, 2017; Moody’s, 2017). Treasury bills were left out from the restructuring to safeguard the financing of daily government activity during the negotiations with its creditors (Asonuma and others, 2017; IMF, 2005a). According to the Grenada Ministry of Finance (2005), residents of Grenada held all the restructured domestic debt.

Two new bonds were offered in exchange for the restructured claims. One bond was denominated in U.S. dollars, and the other in Eastern Caribbean dollars. The U.S. dollar-denominated bond, governed by New York law, was exchanged for external claims, whereas the Eastern Caribbean dollar bond, governed by

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307 Grenada was a small open economy mainly based on tourism.

308 Two domestic bonds (Grenada 8.00% Development Bonds 2006/2007 and Grenada 6.00% Development Bonds 2008) were not subject to the suspension of payments to avoid destabilizing the country’s domestic financial sector. Grenada 6.00% Development Bonds due in 2008 were also excluded from the group of debt eligible for the restructuring (Grenada Debt Exchange Offer, 2005).

309 The Grenadian debt restructuring was conducted without an IMF arrangement (IMF, 2013).

310 The default episode also includes U.S. $51.2 million in bilateral loans (Grenada Debt Exchange Offer, 2005).

311 External claims restructured amounted to U.S. $171.6 million, of which U.S. $155.7 million was denominated in U.S. dollars and U.S. $16 million in Eastern Caribbean dollars. External U.S. dollar-denominated claims were composed of five bonds, two commercial loans, and four guaranteed claims. Eastern Caribbean dollar-denominated external claims were composed of two bonds (Asonuma and others, 2017).
Grenadian law, was exchanged for domestic claims (Grenada Debt Exchange Offer, 2005; IMF, 2005a). The new amortizing bonds had a 20-year maturity, and a 15-year grace period (Asonuma and others, 2017; Moody’s, 2017). As the remaining maturities of the original U.S. dollar-denominated bond was 9 years and the average remaining maturity for the Eastern Caribbean dollar-denominated bonds was 4.3 years, the operation extended maturities by 11.7 years on average. Coupon payments were on average also reduced by 2.3 percent (Asonuma and others, 2017), and were scheduled to be paid semi-annually, according to an increasing structure (IMF, 2005a; Grenada Debt Exchange Offer, 2005). The debt restructuring did not entail either nominal reductions or upfront payments (Moody’s, 2017; IMF, 2005a). Differently from the original bonds, the new instruments included collective action clauses (Moody’s, 2014, p. 30). The government requested a minimum level of overall participation of 85 percent for the completion of the offer (Grenada Debt Exchange Offer, 2005, p. 70). The participation rate was 86 percent (IMF, 2013). Asonuma and others (2017) estimate that net present value (NPV) losses for creditors were slightly higher for Eastern Caribbean dollar-denominated bonds (36 percent) than for the U.S. dollar-denominated bond (35 percent).

312 According to the IMF (2005), the maturity of the new bonds was set from 2021 to 2025.

313 Coupons were set to 0.85 percent until September 2008, 2 percent until 2011, 4 percent until 2013, 5.5 percent until 2015, and 8 percent until 2025.

314 New bonds included CACs (Grenada Debt Exchange Offer, 2005). Interestingly, new bonds envisaged the failure of Grenada to maintain its membership in the IMF as a default event (with a 60-day grace period) (Grenada Debt Exchange Offer, 2005).
References


Grenada debt exchange offer, pp. 72, 73, 75, 82, 83, September 2005.


Framing the crisis

The country was hit by the global financial crisis while still recovering from Hurricanes Ivan (2004) and Emily (2005). From 2006 to 2012, real GDP growth averaged -0.63 percent, mainly due to collapsing tourism and construction. As a member of the Eastern Caribbean Currency Union, monetary and exchange rate policies were constrained. The government adopted expansionary fiscal policies to stimulate the economy. However, fiscal profligacy ultimately put government debt on an unsustainable trajectory. As the public debt-to-GDP ratio peaked at 103.3 percent in 2012, financing from domestic banks and multilateral institutions started drying up.315

On March 8, 2013, the government announced that “circumstances forced it to undertake a comprehensive and collaborative restructuring of its public debt” (Grenada Ministry of Finance, 2013). On March 15, 2013, Grenada defaulted on the coupon payments of the U.S. dollar and Eastern Caribbean dollar 2025 bonds (Asonuma and others, 2017).316 Additionally, the government started accumulating domestic arrears towards local suppliers, which by December 2013 amounted to 3.8 percent of GDP (US$ 30.6 million) (IMF, 2014).

Details on domestic debt restructuring

The debt exchange was launched on October 5, 2015, and closed on November 12, 2015 (Asonuma and others, 2017). Despite the government’s intention to restructure public debt in a comprehensive way, the exercise remained selective. Treasury bills registered on the Regional Government Securities Market (RGSM), overdraft facilities, and some categories of domestic arrears were excluded (Asonuma and others, 2017).317

The entirety of the U.S. dollar and Eastern Caribbean dollar 2025 bonds, which were issued during the 2005 restructuring, were exchanged for new U.S. dollar and Eastern Caribbean dollar bonds due in 2030 (the “2030 bonds”).318 CACs embedded in the old bonds were activated (IMF, 2015; Government of Grenada, 2015b; Asonuma and others, 2017).319 Eastern Caribbean dollar-denominated bonds, amounting to US$ 74.2 million, constituted the domestic-law component of the bond exchange (Grenada Ministry of Finance, 2013).320 Out of this amount, the National Insurance Scheme (NIS) held US$ 34.1 million (IMF, 2014). Past-due interests on the non-NIS-held bonds, amounting to US$ 6.1 million, were also considered as eligible claims for the restructuring (Asonuma and others, 2017; Grenada Offering Circular, 2015).321

315 The country lost access to international markets following the 2005 debt exchange and had not recouped it by the time of the default. On the domestic front, Grenada was only able to roll over the existing 365-day T-bills on the RGSM (Asonuma and others, 2017).
316 Grenada defaulted on U.S. dollar bonds on September 15, 2012 but cured the default within the grace period (Moody’s, 2014).
317 Instruments issued in the RGSM market were spared amid fears of contagion.
318 The new U.S. dollar bonds were issued pursuant to trust indenture.
319 The new U.S. dollar bonds were issued pursuant to trust indenture.
320 As defined in their terms and conditions, the EC$ 2025 bonds held by NIS were disenfranchised, and not considered for voting purposes.
321 Amounts computed using an exchange rate of LCU 2.7 per U.S. dollar (IMF, 2014).
322 Holdouts amounting to U.S. $5.6 million from the 2005 restructuring were included in the debt exchange (IMF, 2015, 2016).
New non-NIS-held domestic bonds were issued with a face value reduction of 50.28 percent. These new bonds were structured as follows. The face value was reduced by 25.28 percent immediately and an additional 25 percent reduction was introduced, conditional on Grenada completing IMF’s emergency credit facility (ECF) program, which occurred in November 2017 (Reuters, 2015; IMF, 2017; Grenada Offering Circular, 2015). A separate agreement with the NIS, which held 82 percent of Grenada’s domestic debt, was finalized at the end of 2015 and entailed a differential treatment for NIS-held bonds (IMF, 2016; World Bank, 2016). The face value of NIS-held domestic bonds and their maturity was extended by 10 years, unlike non-NS bonds, whose maturity was extended on average by only 5 years (Asonuma and others, 2017; Ferguson, 2017). Finally, non-NIS domestic bonds featured a half-year grace period, whereas NIS domestic bonds featured a 10-year grace period (Asonuma and others, 2017).

The exchange also included an interest rate reduction. Old bonds paid 4 percent until September 2013, 5.5 percent until September 2015, and 8 percent until the end of 2025. The new interest rate was set to 7 percent for non-NIS-held domestic bonds and 3 percent for NIS domestic bonds (IMF, 2016). Estimated NPV losses for creditors were 49 percent for non-NIS bonds and 58.7 percent for NIS bonds (Asonuma and others, 2017; Ferguson, 2017). The authorities also reached separate exchanges for other domestic-law instruments (see Table 1 for a summary):

- T-bills amounting to US$ 7.28 million, and Government of Grenada serial bonds amounting to US$ 8.59 million, both held by the NIS, were restructured in November 2015 (Government of Grenada, 2017a; National Insurance Scheme, 2015). The maturity of T-bills was set to 7 years, whereas the maturity of the serial bond was set to 25 years. For both the serial bond and T-bills, the new interest rate was set to 3 percent; the old interest rate was between 5 and 6 percent (Government of Grenada, 2015a). Additionally, T-bills featured a 2-year grace period and the serial bond a 10-year one. The government’s arrears to the NIS, which amounted to US$ 11.53 million in 2015, were restructured into a five-year bond (maturity in 2020) and a 3 percent interest rate (IMF, 2016).

- In February 2016, Grenada restructured a privately placed Treasury bill, which was held by the Grenada Port Authority (GPA) and amounted to US$ 3.15 million. Both principal and arrears were subject to a 50 percent face-value reduction. The new maturity was 15 years, and the interest rate

322 On November 17, 2017, as agreed to in the restructuring, creditors holding the U.S. dollar and Eastern Caribbean dollar bonds due in 2030 cancelled a further 25 percent (around U.S. $58 million) of the outstanding nominal amount (Now Grenada, 2017).

323 Two peculiarities of this exchange are worth noting. First, a “hurricane clause” was included in the new bonds that allows to delay (for up to two payment periods) debt servicing in the case of a future hurricane (Grenada Offering Circular, 2015). According to the contract, the trigger could be invoked up to three times and for events that incur losses larger than U.S. $15 million (IMF, 2015). The aim was to schedule future cash-flow relief in critical times. Second, the exchange gave bondholders the possibility of receiving some potential revenues that Grenada could have collected from the citizenship-by-investment program (option not included in NIS domestic bonds), which offered citizenship to foreign nationals in exchange for qualified donations or investments (Ferguson, 2017; Grenada Offering Circular, 2015). These revenues, which depended on the magnitude of annual inflows, were planned to be available after the completion of the ongoing IMF program. The amount of revenues secured by this program and scheduled to be shared with bondholders, was capped at 35 percent of the face value (computed in NPV) of the new bonds (IMF, 2015).

324 The government became aware of part of these arrears only during the restructuring negotiation with the NIS (IMF, 2016).
was set at 3.5 percent (compared to the old one of 8 percent), with a half-year grace period (Government of Grenada, 2017a; IMF, 2016).

- T-bills held by the RBL (formerly National Commercial Bank), which amounted to US$ 1.22 million, were restructured in 2016. The restructuring did not feature any face-value reduction. The new maturity was set at 7 years and the interest rate was set at 3 percent (compared to the old one of 7 percent), with a two-year grace period. Additionally, an RBL-guaranteed loan to the government, which amounted to US$ 3.15 million, was restructured to US$ 1.63 million (by featuring a 48.25 percent face-value reduction), with a 7 percent interest rate, a one-year grace period, and a 15-year maturity (Government of Grenada, 2017a, 2017b).

- A guaranteed loan for the National Housing Authority (NHA), which amounted to US$ 2.49 million, was restructured in 2016. The newly issued bond featured a 25-year maturity (to 2040), a 3 percent interest rate, and a 10-year grace period (Government of Grenada, 2017a, 2017b).

- The guaranteed debt of the Marketing and National Importing Board (MNIB), which amounted to US$ 5.7 million and was held by a private creditor, was restructured in December 2016 (IMF, 2017). The restructuring featured a 47 percent face-value reduction and the removal of the government guarantee. Additionally, the MNIB made an upfront payment of US$ 1.5 million (Grenada Offering Circular, 2015). For the remaining US$ 1.5 million amount, a 10-year repayment plan was established with a 6 percent interest rate for the first five years and 7 percent thereafter (World Bank, 2016).

- Government debt held by Petrocaribe, which was divided into T-bills amounting to US$ 34.81 million and Government of Grenada 2014/2016 serial bonds amounting to US$ 4.67 million, was restructured in early 2017 (IMF, 2017). The restructuring did not feature any face-value reduction. The maturity for the instruments replacing the T-bills was set to 20 years, whereas it was set to 15 years for the instruments replacing the serial bond. Additionally, a two-year grace period was set in both cases (Government of Grenada, 2017b). The interest rate was reduced to 3 percent, whereas the original one ranged from 4.25 to 6 percent (Government of Grenada, 2017a).

- T-bills held by the Grenada Bank of Commerce, which amounted to US$ 2.34 million and US$ 1.19 million, were restructured in early 2017 in a new private placement bond (IMF, 2017; Government of Grenada, 2015a). The exchange did not feature any face-value reduction, but it included a 7-year maturity extension (IMF, 2016). The new interest rate was set to 3 percent (lower than the original 6 percent of the US$ 2.34 bond and 6.5 percent of the US$ 1.19 bond) with a two-year grace period (Government of Grenada, 2017a).

- Loans received by the government from Republic Bank, which amounted to EC $5.073 million (US$ 1.88 million) and EC $0.838 million (US$ 0.31 million), were restructured in early 2017 (IMF, 2017). The new interest rate was set to 7 percent, and the maturity to 2027 (Government of Grenada,
Additionally, a private placement amounting to US$ 1.24 million was restructured in T-bills carrying a 3 percent interest rate and a maturity set at December 2022.325

As reported in Asonuma and others (2017), estimated NPV haircuts on the domestic instruments listed above were similar to those of the Eastern Caribbean dollar and U.S. dollar 2025 bonds deal, with average NPV losses close to 54 percent (Grenada Offering Circular, 2015).

Table 3: Summary of domestic debt instruments exchanged

<table>
<thead>
<tr>
<th>Creditors</th>
<th>Debt instrument</th>
<th>Amount involved</th>
<th>Restructuring intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIS</td>
<td>T-bills</td>
<td>US$ 7.28 million</td>
<td>Maturity extended to 7 years, coupon reduced by 2%, grace period of 2 years</td>
</tr>
<tr>
<td>NIS</td>
<td>Government bond</td>
<td>US$ 8.59 million</td>
<td>Maturity extended to 25 years, coupon reduced by 3%, grace period of 10 years</td>
</tr>
<tr>
<td>NIS</td>
<td>Arrears</td>
<td>US$ 11.53 million</td>
<td>Converted to a 5-year bond with a 3% coupon</td>
</tr>
<tr>
<td>Grenada Port Authority</td>
<td>T-bills</td>
<td>US$ 3.15 million</td>
<td>Maturity extended to 15 years, coupon reduced by 4.5%, grace period of 0.5-year, face-value reduction of 50%</td>
</tr>
<tr>
<td>RBL</td>
<td>T-bills</td>
<td>US$ 1.22 million</td>
<td>Maturity extended to 7 years, coupon reduced by 4%, grace period of 2 years</td>
</tr>
<tr>
<td>RBL</td>
<td>Guaranteed loan</td>
<td>US$ 3.15 million</td>
<td>Maturity extended to 15 years, grace period of 1 year, face-value reduction of 48.25% *</td>
</tr>
<tr>
<td>NHA</td>
<td>Guaranteed loan</td>
<td>US$ 2.49 million</td>
<td>Maturity extended to 25 years, grace period of 10 years *</td>
</tr>
<tr>
<td>Unknown creditor</td>
<td>Guaranteed debt for MNIB</td>
<td>US$ 5.7 million</td>
<td>Maturity extended to 10 years, face-value reduction of 47% *</td>
</tr>
<tr>
<td>Petrocaribe</td>
<td>T-bills</td>
<td>US$ 34.81 million</td>
<td>Maturity extended to 20 years, coupon reduced by</td>
</tr>
</tbody>
</table>

325 We consider NIS, Grenada Bank of Commerce, Grenada Port Authority, RBL, Marketing and National Importing Board, National Housing Authority, and Republic Bank as local residents. Petrocaribe instead refers to foreign creditors. For all of these agreements, debt is denominated in local currency.
<table>
<thead>
<tr>
<th>Bank/Municipality</th>
<th>Instrument</th>
<th>Amount</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrocaribe</td>
<td>Government bond</td>
<td>US$ 4.67 million</td>
<td>Maturity extended to 15 years, coupon reduced by up to 3%, grace period of 2 years</td>
</tr>
<tr>
<td>Grenada Bank of Commerce</td>
<td>T-bills</td>
<td>US$ 3.53 million</td>
<td>Maturity extended to 7 years, coupon reduced by up to 3.5%, grace period of 2 years</td>
</tr>
<tr>
<td>Republic Bank</td>
<td>Loans</td>
<td>US$ 2.19 million</td>
<td>Maturity extended to 10 years*</td>
</tr>
<tr>
<td>Republic Bank</td>
<td>Government bond</td>
<td>US$ 1.24 million</td>
<td>Maturity extended to 5 years*</td>
</tr>
</tbody>
</table>

* No clear information about coupon reduction.
References


IMF, May, pp. 29, 53, 61, 


Jamaica (2010)

Framing the crisis

Jamaica’s sovereign debt increased sharply after the government intervened to rescue banks during the financial crisis in the 1990s and assumed financial-sector obligations in 2001. With real GDP growth averaging just 1 percent through the 1990s and 2000s, the debt-to-GDP ratio remained well above 100 percent until 2008. In 2009, amid the Global Financial Crisis, Jamaica entered another recession and debt jetted to 135 percent of GDP. Simultaneously, the share of domestic debt increased substantially as foreign investors became more reluctant to lend money to Jamaica (the domestic share of public debt increased from 25.9 percent of GDP in 1995 to 75 percent in 2009).

In the late 2000s, fiscal indicators were rapidly worsening. Debt servicing was absorbing over half of central government revenues, and the debt-to-revenue ratio stood at around 400 percent (Moody’s, 2017). The short-term maturity of most Jamaican debt further exacerbated the fiscal vulnerabilities, leaving the country exposed to rollover risk (in 2009, debt worth 27 percent of GDP was scheduled to mature within two years). The unfavorable conditions forced the government to restructure part of its domestic debt in 2010, with the aim of reducing the interest burden, extending maturities, and replacing variable-rate debt with fixed-rate debt.

Details on domestic debt restructuring

In January 2010, the government launched a comprehensive debt restructuring program targeting domestic debt holders, the majority of which were local financial institutions. The so-called Jamaica Debt Exchange (JDX) was finalized one month later with a participation rate of 99 percent. Prerequisites for the government to proceed with the debt exchange included: a participation rate of at least 90 percent, and the inclusion of almost the entirety of bonds with a residual maturity of two years, and almost all outstanding fixed-rate securities. Only Jamaican residents were entitled to participate in the offer.

All marketable securities that had been issued under local law before December 31, 2009, were considered eligible for the exchange. The exchange excluded short-dated instruments with original maturity under two months, Treasury bills (irrespective of currency denomination), and outstanding Eurobonds. The exchange swapped 345 debt securities for 24 new notes issued under domestic law (Government of Jamaica, 2010; Moody’s, 2017; Robinson, 2010). The exchange involved U.S.$7.9 billion of debt, of which U.S.$6.89 billion was Jamaican dollar-denominated (U.S.$2.68 billion in fixed-rate bonds and U.S.$4.21 billion in variable-rate bonds).

326 Domestic merchant and commercial banks, insurance companies, and pension funds together held more than 80 percent of government bonds (Moody’s, 2017; UNDP, 2010). Given the large exposure of local banks, the government, with the support of a multilateral financing package, introduced the Financial System Support Fund (FSF) for financial institutions participating in the debt exchange. Eligible financial institutions could borrow from the FSF up to 100 percent of the nominal amount of bonds pledged in the exchange (Robinson, 2010).
bonds), and U.S.$1.01 billion U.S. dollar-denominated indexed bonds.327 Accrued interest on old bonds was paid in cash at settlement date (Robinson, 2010).

While the restructuring exercise did not provide nominal reductions, it extended maturities and reduced interest rates. According to the UNDP (2010), average maturities were extended from 5.1 years to 6 years for fixed-rate local-currency bonds, from 5.3 years to 9.5 years for variable-rate local-currency bonds, and from 1.4 years to 4.5 years for U.S. dollar-denominated bonds.328 Average coupons fell from 17 percent to 11 percent (Johnston and Montecino, 2011; Moody’s, 2017). Interest rates for JMD-denominated bonds fell, on average, from 19 percent to 12.1 percent for variable-rate bonds and from 18.1 percent to 12.4 percent for fixed-rate bonds. The interest rate on U.S. dollar-denominated debt decreased from an average of 9.1 percent to 7 percent. On average, NPV losses for creditors were estimated from 10 to 20 percent (Moody’s, 2013; Schmid, 2016).

Figure 1 summarizes the structure of the exchange and the treatments reserved for different classes of creditors. Fixed-rate bond holders could exchange their instruments for new fixed-rate bonds only. Variable-rate bond holders could exchange their instruments for new variable-rate, fixed-rate, or CPI-indexed bonds. U.S. dollar-denominated bond holders could exchange their instruments for new U.S. dollar-denominated bonds only (UNDP, 2010). Only holders of old U.S. dollar-denominated debt were able to obtain new U.S. dollar-denominated securities.329

![Figure 1: Debt exchange structure](source: UNDP (2010)).

327 This amount is computed using the 2010 exchange rate of LCU 89.66 per U.S. dollar taken from the Bank of Jamaica’s database. As reported by the IMF (2010), the authorities also exercised their call option on the bonds not tendered during the exchange (amounting to U.S.$62.46 million), and they were redeemed for cash in May.

328 We found alternative estimates of the average maturity extension resulting from the exchange. According to Moody’s (2017), average maturities were extended from 2 years to 5 years; according to Johnston and Montecino (2011), they were extended from 5.3 years to 8.7 years; and according to Grigorian and others (2012), they were extended from 4.7 years to 8.3 years.

329 The share of U.S. dollar-denominated debt remained unchanged after the exchange of around 12 percent of domestic debt (Robinson, 2010).
Retail investors holding bonds with an individual value of approximately U.S.$45,000 and an aggregate value not exceeding U.S.$250,000 could exchange their old notes for a new, single bond maturing in 2013 (this was known as the “retail offer”). Figure 2 shows the composition of Jamaican debt holders at the time of the exchange and, particularly, the large component of debt financial institutions held.

Figure 2

Source: Grigorian et al. (2012).
References


Jamaica (2013)

Framing the crisis

Notwithstanding the 2010 debt restructuring, Jamaica continued experiencing slow GDP growth, averaging only 0.46 percent from 2011 to 2012.\(^{330}\) As a result, general government gross debt peaked at 145.05 percent of GDP in 2012. High debt servicing costs together with high debt ratios limited the country’s fiscal space significantly. In addition, liquidity pressures resumed in 2012, as around U.S.$1.3 billion of domestic debt was scheduled to mature in February 2013 (IMF, 2013a).

On February 12, 2013, the government launched the so-called National Debt Exchange (NDX), aiming to achieve gross savings worth 8.5 percent of GDP by 2020. The exchange did not include bonds held by non-residents, and the closing date for the NDX program was set for February 28, 2013.\(^ {331}\)

Details on domestic debt restructuring

The debt exchange registered a participation rate of around 99 percent and involved U.S.$8.796 billion of all outstanding domestic debt.\(^ {332}\) Of this amount, U.S.$8.789 billion was local currency-denominated (including fixed, variable, and CPI-indexed bonds) and U.S.$7.28 million was U.S. dollar-denominated. While the exchange offer was structured similarly to the 2010 exchange, it included two additional instruments: Fixed Rate Accreting Notes (FRANs) maturing in 2028 and paying a 10 percent coupon, and newly issued CPI notes maturing from 2025 to 2040 with a step-up coupon. The law of Jamaica governed the newly issued instruments. Accrued interest on old notes was paid in cash (Government of Jamaica, 2013).

Figure 3 summarizes the structure of the exchange and the different treatments reserved for different classes of creditors. Holders of JMD-denominated fixed- and variable-rate notes were offered the option of receiving FRANs. This option was designed specifically for state-owned enterprises (SOEs) intending to recover the principal in full. Those who opted for FRANs received U.S.$80 principal for every U.S.$100 exchanged, and the principal was designed to grow over time, reaching U.S.$100 at maturity. The accretion (or growth) plan began in 2015 and was structured as follows: 0.5 percent accretion every six months until 2021, 1 percent every six months until 2027, and 1.5 percent every six months until maturity.

Holders of fixed- and variable-rate Jamaican dollar-denominated or U.S. dollar-denominated notes were given the option of receiving 2040 CPI notes. These instruments were specifically designed for pensions and other similarly long-dated/asset-liability accounts. Holders of U.S. dollar-denominated notes were given two options. They could either exchange their US dollar-denominated securities for Jamaican dollar-denominated CPI 2040 using the FX conversion rate of the determination date (expected to be February 20, 2013), or they could

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\(^{330}\) The reliance on a mature industry (tourism) and high-energy costs weighed on the economy.

\(^{331}\) A small second phase of the exchange was implemented in March 2013 (Government of Jamaica, 2013; IMF, 2013a; Moody’s, 2017).

\(^{332}\) At the scheduled closing date of the exchange, the participation rate stood at 97 percent, but the authorities decided to extend the offer by one week, finally achieving 99 percent participation (Moody’s, 2013; United States Department of the Treasury, 2013).
exchange them for newly issued CPI notes with an initial nominal amount equal to the outstanding principal. e (Government of Jamaica, 2013a; IMF, 2013a).

Small creditors received a so-called retail offer structured as follows: variable- or fixed-rate Jamaican dollar-denominated notes maturing in 2013 or 2014, and with an aggregate principal value of JMD 25 million maximum could be exchanged for fixed-rate Jamaican dollar-denominated notes maturing February 24, 2014, with a 7 percent coupon. Similarly, old U.S. dollar-denominated notes holders with a maximum aggregate principal value of U.S.$200,000 could receive new retail fixed-rate U.S. dollar-denominated notes maturing February 24, 2014, with a 5 percent coupon (Government of Jamaica, 2013).

Despite the unusual structure of FRAN notes, the debt exchange did not result in a nominal reduction of the value of the debt, which would have affected local financial institutions negatively. Most debt maturities were extended by three to five years, though a small portion of maturities were extended by 10 years (Burne, 2013; Moody’s, 2017). Figure 5 pictures the pre- and post-exchange maturity structure.

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333 Financial institutions held around 50 percent of total domestic debt (IMF, 2013a).
334 According to Schmid (2016), the maturity extension was from 6.4 to 10.2 years.
Interest rates were reduced between 0.75 and 5 percent (IMF, 2013a). According to Schmid (2016), yields of old notes averaged 10.1 percent for Jamaican dollar-denominated debt (12.4 percent for fixed-rate notes and 8.3 percent for variable-rate notes) and 7 percent for U.S. dollar-denominated debt. Estimates of NPV losses range from 11 to 12 percent (Moody’s, 2013, 2017).
References


Kuwait (1990)

**Framing the crisis**

After Iraq had lost access to international financial markets, it insisted on Saudi Arabia and Kuwait cancelling its foreign debt. While Saudi Arabia accepted, Kuwait refused, and this refusal led to the Iraqi invasion on August 2, 1990 (Chaudhry, 1991; Rehman, 1998). The immediate consequence was a total halt of banking activities and financial transactions in Kuwait, which affected both public and private banks (Government of Kuwait, 1991; IMF, 2004; OECD, 2012; Reinhart and Rogoff, 2011; Metz, 1993).335

**Details on domestic debt restructuring**

The closure of banks during the Iraqi War resulted in a freeze of domestic deposits, which, as reported by the Central Bank of Kuwait, amounted to U.S.$26.39 billion (KD8.121 billion) in the second quarter of 1990 (Moody’s, 2008).336

Following the withdrawal of Iraqi troops in February 1991, banks resumed their activities in Kuwait on March 24, 1991 (IMF, 2005; Moody’s, 2008). As a first step, a set of temporary withdrawal limits were introduced. Until June 30, 1991, account holders were permitted to withdraw up to KD4,000 each month or the equivalent in foreign currencies. On July 1, 1991, the maximum monthly withdrawal was raised to KD6,000 and on August 3, 1991, withdrawal restrictions were finally lifted (Lauterpacht, Greenwood, and Oppenheimer, 1998; Moody’s, 2008). Additionally, the government instructed banks in Kuwait to set their customer accounts at the levels recorded on August 1, 1990, and to pay interest on deposit accounts for the entire period of the occupation (Lauterpacht, Greenwood, and Oppenheimer, 1998).337

335 Those banks that managed to continue their operations did so in an irregular way (Lauterpacht, Greenwood, and Oppenheimer, 1998).

336 Amounts in U.S. dollar are computed using an exchange rate of 3.25U.S.$ per 1 LCU.

337 Due to the invasion, the government offered to protect the accounts of all depositors and, indeed, forced withdrawals made during the occupation were completely restored (IMF, 2004; Lauterpacht, Greenwood, and Oppenheimer, 1998).
References


Framing the crisis

In 1980, following a military coup, Liberia’s economy deteriorated significantly due to both the decline of the terms of trade and economic mismanagement. The public sector also started accumulating arrears, as relations with multilateral and bilateral creditors broke down (IMF, 2003b).\textsuperscript{338} In an attempt to fight the widening government deficit, the government froze public-sector hiring and forced all salaried workers to purchase national savings bonds in January 1981 (Obodozie, 2004; Ungar, 1981; Jaynes, 1981).\textsuperscript{339}

In December 1989, after prolonged political instability, a civil war erupted (African Development Fund, 2005; IMF, 2000a, 2005a; Moody’s, 2008). The war disrupted economic activity, reducing GDP to 40 percent of its pre-war period. The conflict dismantled the country’s institutional capacities, destroyed infrastructure, and triggered a human and capital flight (African Development Bank, 2008a; IMF, 2005a, 2008a).\textsuperscript{340} Amid declining investor confidence, foreign funding also dried up and the government started financing its deficit through arrears accumulation on both external and domestic debt payments, and through borrowing from the domestic banking system, mainly from the central bank (IMF, 2004, 2005a).\textsuperscript{341}

In August 1996, the Economic Community of West African States Monitoring Group brokered a peace agreement (the Abuja II peace agreement) between the warring factions. The agreement paved the way for the national elections of July 1997 (African Development Fund, 2005; IMF, 2000b, 2005a). The election of the former rebel leader Charles Taylor in August 1997 ushered in a peaceful period marked by unity until the end of 2000, when hostilities resumed.\textsuperscript{342} Hostilities ceased definitely on August 18, 2013, with the Comprehensive Peace Agreement (CPA) and the exile of President Charles Taylor in Nigeria (African Development Bank, 2008a; African Development Fund, 2005; IMF, 2005a).

The National Transitional Government of Liberia (NTGL) governed Liberia until the completion of legislative and presidential elections in 2006, won by President Ellen Johnson-Sirleaf (IMF, 2004). The new government quickly enacted a number of reforms, including a major debt reconciliation program, which took place between 2006 and 2007, and a domestic debt resolution strategy (African Development Bank, 2008a; African Development Fund, 2005; IMF 2005a, 2012).\textsuperscript{343} The implementation of these programs was particularly problematic, as the loss of experienced and competent staff during the war jeopardized the functioning of


\textsuperscript{339} According to the scheme, every worker was forced to forgo at least a month’s salary to buy national savings bonds. The operation was implemented by using the National Bank of Liberia as a fiscal agent (FrontPage Africa, 2016; Ungar, 1981; Liberian Observer, 2018a).

\textsuperscript{340} Ten out of 14 banks were closed due to the civil war (Moody’s, 2008).

\textsuperscript{341} External and domestic debt servicing stopped with the outbreak of the civil war (IMF 2000a, 2012). Additionally, the breakdown of relationships with multilateral and bilateral creditors increased the speed of domestic arrears accumulation (IMF, 2003b).

\textsuperscript{342} In this period, the government accumulated unpaid vouchers amounting to U.S.$2 million (IMF, 2000a).

\textsuperscript{343} In April 2004, the government created the Debt Management Task Force. The task force was initially successful in reconciling domestic debt data. Due to lack of funding, it ceased to exist in 2005 (African Development Bank, 2008a).
Details on domestic debt restructuring

In 1989, Liberia defaulted on national savings bonds issued in 1981 (African Local Currency Bond Fund, 2018; Agency for International Development, 1989; All Africa, 2007; Central Bank of Liberia, 2006; Liberian Observer, 2018b; Moody’s, 2008; Reinhart and Rogoff, 2011). The bonds were denominated in local currency. Estimates of their face value amount range from US$ 50 to US$ 82 million (African Development Fund, 2005; Central Bank of Liberia, 2006; IMF, 2000a, 2006; Moody’s 2013; Jaynes, 1981). No actions have ever been taken by the government to pay back those bonds. 346

The 2006–07 debt reconciliation process established that Liberia had emerged from the civil war with domestic arrears to civil servants, suppliers, and financial institutions amounting to US$ 914 million (African Development Bank, 2007; IMF, 2003a, 2007, 2014).347 Another verification exercise was undertaken to classify claims as valid, contestable, or rejected.348 Only US$ 304 million in claims were deemed valid: US$ 255.88 held by the central bank, US$ 7.19 held by domestic financial institutions, and US$ 40 million of other claims (including salary arrears for US$ 26 million). US$ 317.5 million were deemed contestable, and US$ 292.5 million were rejected (African Development Bank, 2007; IMF, 2007; Ministry of Finance, 2009; World Bank, 2009).349

From April to June 2007, the government implemented the non-salary component of the domestic debt resolution strategy (AllAfrica, 2007). During the process, valid claims belonging to one claimant were consolidated to establish the total treatment of that claimant (Ministry of Finance, 2007).350 Valid claims were paid back at a discount, with the discount rate varying with the size of the claim and the identity of the creditor.351 With the exception of debt owed to the central bank of Liberia, all claims were discounted from 0 percent (those below US$ 1,000) to 87.6 percent (those above US$ 1 million).352 In aggregate, valid claims to private suppliers were discounted from US$ 40 million to US$ 8.1 million (Central Bank of Liberia, 2009).

344 The civil war reduced Liberia’s archiving capacities, which resulted in poor quality and coverage of statistical information (African Development Bank, 2008b; IMF, 2000b).

345 Given the incompleteness of Liberia’s records, information on commercial debt is based on creditors’ claims (World Bank, 2009).

346 National savings bonds had been cancelled from Central Bank of Liberia’s accounts without any explanation (Liberian Observer, 2018b). The latest information dates back to the 2006 annual report (Central Bank of Liberia, 2006).

347 The U.S. $914 million (150 percent of GDP) did not consider previous civil service and military salary arrears, which were estimated at U.S. $30.3 million (end-March 2007). After the validation process, a total of U.S. $5.24 million pre-NTGL salary arrears was paid back through direct budget appropriations (IMF, 2007; Ministry of Finance, 2007).

348 The review of domestic debt was undertaken with assistance from KPMG Ghana (African Development Bank, 2008a).

349 The government established a Trust Fund to secure resources to pay back the debt as planned (IMF, 2007).

350 Claims were grouped according to their size (Ministry of Finance, 2008).

351 As reported by All Africa (2007), the government gave priority for payment to debt denominated in national currency.

Commercial bank claims were discounted at an average rate of 46.6 percent, with the rate calibrated in each case to avoid triggering a default of the bank in question. Holders of contestable claims were invited to provide further documentation (IMF, 2009). The government committed itself to settling those claims in the future on a case-by-case basis, based on the recommendations of KPMG Ghana. Rejected claims were discarded (IMF, 2007, 2008b; Ministry of Finance, 2009; World Bank, 2009).

In May 2007, local currency-denominated debt owed to the Central Bank of Liberia was restructured into securities with a 30-year maturity, and a 10-year grace period on principal (Government of the Republic of Liberia, 2016). Interest rates were set to increase every 5 years, for the first 15 years, from 1 percent to 2.5 percent, and to remain constant thereafter (African Development Bank, 2008a; IMF, 2008b). The government signed similar restructuring agreements with two commercial banks: Liberia Bank for Development and Investment (LBDI) and the ECOBANK, whose claims were restructured into securities featuring a 30-year maturity, a four-year grace period on principal repayments, and debt service increasing over time (IMF, 2006, 2007, 2014; Ministry of Finance, 2007, 2008). Total claims from the central bank of Liberia and these commercial banks restructured into securities had a face value of US$ 278 million (Government of the Republic of Liberia, 2008; World Bank, 2009; African Development Bank, 2008a).

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353 New claims related to pre-2006 arrears continued arising through court judgments, but they had a low value (IMF, 2012).
354 See the Banking Law (National Bank of Liberia Act) - Title 6, page 22.
355 In June 2007, debt owed to the Central Bank amounted to 90 percent of total domestic debt (African Development Bank, 2008a).
356 Additionally, as reported by the Government of the Republic of Liberia (2014) and the IMF (2009), from 2008 to 2009 the Liberian government signed an agreement with LBDI to restructure a 7-year maturity loan granted in November 2007 and amounting to U.S. $4.84 million into a 10-year government bond. No further information is available regarding this episode.
References


——— (2006). “Liberia: First Review of Performance Under the Staff-Monitored Program—Staff Report; Press Release on the Executive Board Discussion; and Statement by the Executive Director for


Framing the crisis

The Liberian economy was severely hit by the outbreak of the Ebola Virus Disease in March 2014 (IMF, 2016a, 2016b). Production shrunk in all sectors, and real GDP growth declined from 8.5 percent in 2013 to zero in 2015 (IMF, 2016b). With the economy still reeling from the Ebola pandemic, Liberia suffered from a second shock: declining iron ore and rubber prices, two of the country’s major export commodities (IMF, 2016a, 2016b). The decline of price of commodities was more persistent than originally anticipated and generated a prolonged decrease in the value of exports, production cuts, and job losses (IMF, 2016b).

As the economy struggled to recover from the two shocks, fiscal deficits soared amid mounting spending pressures and declining government revenues, which exacerbated existing fiscal vulnerabilities and triggered a selective domestic default in 2016 (IMF, 2016b).

Details on domestic debt restructuring

In 2016, Liberia defaulted on US$ 10 million of bank loans with a three-year maturity, which it obtained from seven domestic banks in June 2013. The claims were related to: commercial banks’ pre-financing of a government’s direct infrastructure loan, the Rubber Planters Association 2014 loan, direct payments made on behalf of the Liberian government, and loans given to contractors for pre-financing several other infrastructure projects (Government of the Republic of Liberia, 2019).

In May 2019, the Liberian government and the seven domestic banks signed a restructuring agreement. The loans were restructured into a government bond amounting to US$ 65.23 million, which included the longstanding accumulated arrears. The bond featured a seven-year maturity, a 4 percent coupon rate, and an amortizing structure (Government of the Republic of Liberia, 2014, 2019; IMF, 2019). Additionally, authorities agreed to restructure all outstanding government debt owed to the central bank, amounting to US$ 497 million, into a 15-year amortizing loan paying a 4 percent coupon and offering a 10-year grace period (IMF, 2019).

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357 The Ebola pandemic lasted until June 2016 (IMF, 2016b).
358 Domestic revenue was about 4 percent lower than the amount approved in the budget (IMF, 2016b).
359 Other domestic arrears in 2019 amounted to U.S. $35 million (IMF, 2019).
References


Macedonia (1991)

Framing the crisis

In September 1991, following the breakup of the Socialist Federal Republic of Yugoslavia (SFRY), more than 90 percent of the voting population approved the creation of an independent state called the Former Yugoslav Republic of Macedonia (FYRM). While independence was declared straight after the referendum, the independent conduct of economic policies only commenced in April 1992, when troops from the SFRY left the country and a new currency was introduced (IMF, 1998; World Bank, 1994).

The FYRM inherited extremely difficult macroeconomic conditions aggravated by wars, embargoes, trade sanctions, and political instability in the Balkans (IMF, 1998). After the separation from the SFRY, the FYRM was left with an exceptionally small stock of foreign reserves (around US$ 18 million in early 1992), as the National Bank of the SFRY withheld a large part in Belgrade. Additionally, the National Bank also seized the counterpart assets of foreign currency-denominated deposits, which residents of the SFRY could hold in domestic banks. As a result, banks in the FYRM were unable to service deposits, which remained frozen from 1991 (Flanagan, 2008; World Bank, 1999). In 1992, the Macedonian government took over the obligations of the SFRY central bank towards its banks and recognized the deposits as a state liability, relieving banks from their obligation to pay interest to their depositors (IMF, 2000b; World Investment News, 2001; World Bank, 1994, 1995).

Details of domestic debt restructuring

Frozen foreign currency deposits amounted to US$ 1.2 billion (21.4 percent of GDP) and were mainly denominated in deutsche marks (IMF, 2000a; Stavreski, 1998; World Bank, 1994). Interest on those deposits accrued at an average annual rate of about 5.5 percent, depending on the currency of denomination and the maturity.

From 1993, the Macedonian government allowed cash withdrawals only for personal consumption on the basis of a "minimum needs consumption basket" computed according to the average wage (IMF, 1998, 2000a; International Business Publications, 2012; World Bank, 1994; World Investment News, 2001). Given the difficult fiscal situation in the FYRM, the government initially avoided issuing public debt to back the foreign exchange deposits. Instead, it opted for a non-fiscal solution to the problem, which gave depositors the...

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360 In such a difficult context, the FYRM often resorted to domestic and external arrears accumulation to fund its deficits (World Bank, 1994).
361 Banks controlled by socially owned enterprises dominated the banking system (IMF, 2000a).
362 See the Law on the 'guarantee of the Republic of Macedonia of foreign exchange deposits of citizens.' Macedonia agreed to repay foreign currency deposits in domestic banks and local branches of foreign banks, regardless of the citizenship of the savers. See Official Gazette of the Republic of Macedonia no. 26/92 (ECHR, 2011).
363 About three-fourths of deposits were accounts with less than EUR 100 (IMF, 2000a).
364 After the freeze, interest on foreign currency deposits was not paid to depositors, but kept accruing over time (IMF, 1998; World Bank, 1994).
365 In 1993, the government also introduced measures aimed at reducing the attractiveness of holding foreign currency deposits such as a reduction in the interest paid (World Bank, 1994). In the second half of 1993, the average interest rate paid on foreign exchange deposits was reduced from more than 7 percent to 5.2 percent (World Bank, 1994).
possibility to use frozen deposits in the context of a privatization program to purchase government property, apartments, and business offices, including socially owned enterprises, and to pay custom duties (IMF, 1998, 2000a; World Bank, 1994, 1995). In a second moment, however, the government resorted to short- and long-term government bonds to compensate depositors (IMF, 2000a).

On April 20, 2000, the parliament passed a law that enabled the government to settle the liabilities to small depositors in cash and to issue negotiable government bonds to large depositors (Government of the Republic of Macedonia, 2000; IMF, 2000b; Reuters, 2000). Later in the year, the FYRM issued EUR 546.5 million of Eurobonds, which featured a 10-year maturity, a two-year grace period, a 2 percent coupon, and biannual payments of principal and interest (in April and in October) in denars but indexed to the exchange rate (IMF, 2003; National Bank of the Republic of Macedonia, 2006, 2012; Republic of Macedonia Ministry of Finance, 2005). According to the law, holders could exchange those bonds at face value for land or public assets (Flanagan, 2008).

The restructuring also cleared domestic arrears and other domestic claims. After independence the government accumulated a sizable amount of domestic arrears to suppliers and benefit recipients due to increasing public expenditures and low tax revenues (IMF, 1998; World Bank, 1994, 1999). In October 1998, the Constitutional Court’s ruling required the government to make retroactive payments to pensioners, which were estimated between US$ 0.58 billion and U.S.$ 1.95 billion, around 3 and 10 percent of GDP (IMF, 2000b). Additionally, by 2002, the FYRM had started clearing domestic claims related to the nationalization of properties by the SFRY from 1945 to 1990 by issuing “Denationalisation bonds” (Republic of Macedonia Ministry of Finance, 2006). These bonds, which amounted to more than EUR 150 million (US$ 133.93 million), featured a 10-year maturity, a 2 percent coupon, and a denomination in euros (Republic of Macedonia Ministry of Finance, 2005).

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366 Such an option reduced the level of foreign currency deposits by about U.S. $150 million (IMF, 2000a; World Bank, 1994). See the Law of Transformation of Enterprises with Social Capital (World Bank, 1994).

367 The IMF advised Macedonian authorities to issue two classes of bonds, with the obligation to non-residents being serviced with a much shorter maturity. Authorities, however, contended that it would have been difficult to make such a distinction and that it would have constituted unequal treatment between domestic and foreign depositors (IMF, 2000b).

368 This bond issuance corresponded to the first quotation of treasury bonds on the Macedonian Stock Exchange (Ivanovski, 2013).

369 We found information on domestic arrears starting in 1994, when they amounted to 3.8 percent of GDP in 1994 (IMF, 1998; World Bank, 1994). Due to the low level of discretionary expenditure, the government had limited flexibility to adjust in case of lower-than-expected revenue, and it was then forced to run up arrears (IMF, 1998).

370 The values are computed by taking 1998 GDP.

371 Amounts in U.S. dollar are computed using an exchange rate of 1.12EUR per U.S. $.
References


Madagascar (2002)

Framing the crisis

Political turmoil followed the disputed presidential elections of December 16, 2001, and mass protests ensued (BBC, 2018). The positive economic trend, which the country had experienced from 1995, reversed, and GDP declined 12.7 percent in 2002 (IMF, 2003c).

When Ravalomanana self-proclaimed himself president, the incumbent president withdrew to the coastal city of Toamasina, taking control of a number of central bank branches, while the central bank’s management expressed allegiance to his rival. Faced with a split in the central bank management, foreign depositaries froze the central bank’s external reserves, which impeded the repayment of external obligations (IMF, 2003a). In January 2002, central bank operations ceased, and the Treasury bill market closed (IMF, 2003a; World Bank, 2003).

Details on domestic debt restructuring

The amount of public debt involved in the episode was US$ 200 million of local currency debt (World Bank, 2003). The Treasury bill market reopened on October 23, 2002. All Treasury bonds, including those held by commercial banks, were rolled over automatically until the reopening of the Treasury bill market (IMF, 2003a, 2003b). At the reopening of the market on October 23, 2002, interest rates were higher than the levels that had been observed before its closure in January 2002 (IMF, 2003b). Interest rates increased from 5.5 percent to 11 percent for four-week bills, from 8.9 percent to 11.9 percent for 12-week bills, and from 9.1 percent to 12.7 percent for 24-week bills (IMF, 2002).

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372 In April 2002, the Constitutional Court confirmed the election results (Global Security, 2016).

373 In the same period, the central bank and the government reached an agreement according to which outstanding government liabilities with the central bank (for which no repayment schedule existed) were converted into marketable government securities of different maturities (see 2004 budget law). This debt amounted to FMG 1,624 billion at end-2002, with FMG 1,100 billion in special bonds (offering low remuneration) and FMG 524 billion in foreign currency-denominated bonds (IMF, 2003c, 2004). The conversion had a minimal impact on the budget, as the central bank agreed to transfer any net income from the conversion to the Treasury (IMF, 2004).

374 According to S&P (2003), normal debt service resumed in July 2002 with the end of the political crisis, which was marked by Ravalomanana’s main opponent leaving the country (BBC, 2018; Global Security, 2016).

375 The episode also included the clearing of FMG 27 billion (U.S. $20.49 million) of domestic arrears in 2001 (IMF, 2003a). From the 1990s, Madagascar had domestic arrears mainly because of wars, weak budget execution, and cash management (IMF, 1999a, 2000, 2004, 2008, 2010, 2014, 2015). In 1997, the government started implementing a five-year program to eliminate the stock of domestic payments arrears, which amounted to around 2 percent of GDP as of end-1996 (IMF, 1999b). As of 2002, the stock of domestic arrears still amounted to around FMG 244 billion (IMF, 2003c). In 2013, the government developed a strategy to repay budgetary arrears, which amounted to 3.8 percent of GDP. Arrears to the central bank were settled through the issuance of a debt instrument with a 15-year maturity, 3-year grace period, and an interest rate equal to the central bank’s policy rate. To clear arrears with public companies, the Treasury issued special Treasury bonds. (IMF, 2014). According to the IMF, domestic arrears amounted to 3.4 percent of GDP in 2014 (IMF, 2017a) and to 3.5 percent in 2015 (IMF, 2016). At the time of writing, Madagascar is still working out the outstanding amount of domestic arrears (IMF, 2017a, 2017b, 2018).


Washington: IMF, December 13,


Washington: IMF, January, pp. 13, 14, 17, 51,


Mexico (1982)

Framing the crisis

Mexico experienced a period of strong economic growth, low inflation, and moderate external debt accumulation from the 1960s to mid-1970s. In 1977, Lopes Portillo’s administration embarked on an ambitious investment program to take advantage of high oil prices. This investment plan, together with the separation of the audit power over public expenditures and revenues between two different authorities, led to a widening of the fiscal deficit, reaching 6.7 percent in 1978 and 7.7 percent in 1979. The fiscal budget for 1981 assumed a further 10 percent increase in the oil price, which never materialized. When the oil price started falling, Mexico had to lower its export prices. Windfalls from oil sales declined substantially, and the fiscal deficit rose to 14.8 percent of GDP in 1981 (Sangines, 1989).

Amid expectations of a currency devaluation, capital began to flee the country and U.S. dollar-denominated accounts (called Mexdollars) shrank due to concerns regarding the effective convertibility of these deposits (Ortiz, 1983). In February 1982, the peso was devalued 40 percent (Sangines, 1989) and capital outflows became so intense that, on August 18, 1982, the government decided to freeze the Mexdollars accounts and forcibly convert them into pesos (Banco de Mexico, 1983; New York Times, 1982; Houston Chronicle, 1986; Los Angeles Times, 1986; Middlebrook and Zepeda, 2003; Reinhart and others, 2003).

A few days later, Mexico officially imposed a 90-day moratorium on principal payments of external debt (Banco de Mexico, 1984; Wijnberge, 1990). Finally, by presidential decree on September 1, the Mexican government imposed the nationalization of the entire banking system and full exchange-rate controls to halt the capital flight (Alvarez, 2014; Sangines, 1989).

Details on domestic debt restructuring

Mexdollar accounts held domestically amounted to US$ 12 billion in August 1982 (Houston Chronicle, 1986; Los Angeles Times, 1986; Mas, 1995). The government converted them, applying an old regulation that

376 The growth rate of government expenditure increased at an average of 10 percent from 1977 to 1981 (Ize and Ortis, 1983).
377 The Ministry of Finance only maintained control of revenue collection (Sangines, 1989).
378 Inflation tax and external debt accumulation became the main sources of financing (Wijnberge, 1990).
379 The attractiveness of Mexdollars was dependent on the perception of their effective substitutability with U.S. dollars, which until then had been supported by the authorities’ commitment to maintain full convertibility of peso and unrestricted capital flows (Ortiz, 1983).
380 See Artículo 8º. De la Ley Monetaria, circular 46/82 del 18 de agosto de 1982 and circular 48/82 del 20 de agosto de 1982 (Banco de Mexico, 1983; 1984). The freeze and the conversion affected both private and public banks (Banco de Mexico, 1984; Alvarez, 2014, 14; Sangines, 1989).
381 In the same month, Mexico started negotiating with international banks on restructuring its external debt set to expire from 1982 to 1984 (Banco de Mexico, 1984).
382 The capital flight peaked in 1982 (Ize and Ortis, 1983).
allowed bankers to pay those liabilities in pesos rather than in U.S. dollars. While the market exchange rate was 110 pesos per U.S. dollar, the currency conversion was set at the more favorable rate of 69.5 pesos per U.S. dollar through Circular 46/82 (Banco de Mexico, 1983). On September 1, the exchange rate was set to 70 pesos per U.S. dollar for the remaining Mexdollars (Banco de Mexico, 1984; Middlebrook and Zepeda, 2003; Rogers, 1992), resulting in a 30 percent loss for investors (Los Angeles Times, 1986; Houston Chronicle, 1986). Mexdollar deposits were held domestically and accounted for roughly 30 percent of the banking system’s private-sector deposits (Mas, 1995). All dollar-denominated deposits were converted forcibly in the operation, bringing the participation rate to 100 percent.

New Mexdollar accounts were permitted again after August 1982 but only in rare cases (Rogers, 1992). Only in April 1986 did Mexico approve a measure that allowed private citizens to open U.S. dollar accounts again in domestic banks, though with severe restrictions (Houston Chronicle, 1986). While in 1982 the dollar accounts in Mexican banks offered interest rates of about 10 percent higher than U.S. money market accounts, in 1986 the interest rate premium was roughly 7 percent (Los Angeles Times, 1986). In 1987, Mexico’s Supreme Court of Justice declared the forced conversion as unconstitutional, but no compensation was paid to Mexdollar holders (Mas, 1995).

383 Due to the conversion, Mexdollar holders could only withdraw money from their accounts in local currency. Additionally, they could not transfer money abroad from these accounts (New York Times, 1982).
384 In addition to the exchange rate established for the conversion, Mexdollar holders had to pay 14 cents every day to convert their money (Banco de Mexico, 1984).
385 U.S. dollar-denominated accounts were permitted to diplomats, tourist agents, exporters and importers who needed U.S. dollars to conduct business transactions (Houston Chronicle, 1986).
386 In March 1977, the government decided to peg Mexdollar deposits rates for different maturities to the corresponding Eurodollar rates (Ortiz, 1983).
References


Moldova (1993)

Framing the crisis

Following Moldova’s independence, GDP declined 50 percent from 1991 to 1994 due to severe droughts in 1992 and 1994 as well as internal conflict. Price liberalization and the monetization of the deficit, averaging 26 percent of GDP, led to hyperinflation peaking at 2,500 percent in 1992. Starting in 1993, with the government facing increasing difficulties tapping financial markets, domestic arrears became the main source of funding. Moldova’s fiscal position further deteriorated from 1995 to 1998, mainly due to poor revenue collection, and the failure of the government to limit expenditures due to political pressures, such as the presidential election in 1996, and overly optimistic growth expectations (IMF, 1999, 2004).

When the Russian crisis hit in August 1998, exports dropped, the exchange rate depreciated, and inflation resurged. Additionally, deposit withdrawals put a serious strain on the Moldovan financial system (IMF, 1999). Despite adopting some austerity measures, the fiscal deficit remained stubbornly high at about 8 percent. Meanwhile, both external and domestic arrears soared (IMF, 1999). Against this background, the market for government bonds quickly dried up, and the central bank had to step in to provide emergency liquidity to the government to avoid a default on maturing Treasury bills (IMF, 1999). As the government adopted further austerity measures, the deficit narrowed to less than 1 percent in 2000 (IMF, 2002), improving the trajectory of the debt-to-GDP ratio. That said, debt-servicing difficulties persisted, and the country kept accumulating domestic arrears (IMF, 2006).

Details on domestic debt restructuring

In 1997, the government made a first attempt to reduce arrears, clearing L430 million of domestic arrears (US$ 172.28 million or 4.6 percent of GDP), which were accumulated toward pensions and allowances. According to the plan, every pensioner received a so-called talon from the post office or savings bank, which specified the amount of debt owed to each pensioner at end-1996. The talon enabled the holder to buy goods and to pay for services and taxes. A second effort occurred in 1998, when the government allowed pensioners to pay their electricity bills with pension arrears (IMF, 1999).

387 A financial stabilization program, supported by an IMF stand-by arrangement, was adopted in 1993.

388 Between 1995 and 1997, Moldova diversified its financing options. Financing from abroad, from domestic banks, and from non-banking sectors reduced the country’s reliance on central bank funds.

389 U.S. dollar amounts are computed by using an exchange rate of L4.026 per U.S. dollar.

390 Every shop had a list of pensioners eligible for procurement against the pension-debt talon. Goods and differed from place to place. Since the choice of goods was limited and prices were set above the ongoing market rates, the plan left the pensioners worse off.
The IMF reports detailed information on domestic arrear stocks from 2000 to 2018. Arrears declined steadily from L941 million in 2000 to L54.7 million at the end of 2018 as the government maintained its efforts to reduce them.

The IMF recognized the existence of persistent elements resulting in expenditure arrears such as unrealistic budgeting, weak expenditure controls, inefficient cash management, or gaps in reporting (IMF, 2016).

References


Mongolia (1997)

Framing the crisis

Over half of all loans in the Mongolian banking system were non-performing in late 1996 due to the impact of falling copper export prices on the profitability of firms, inadequate management, and weak supervision. A banking crisis ensued when the government shut down Ardyn Bank and the Insurance Bank on December 13, 1996 (IMF, 1999; Honma, 2015). To resolve the crisis, the government created three new financial institutions (World Bank, 1997): the Savings Bank, which inherited retail deposits of failed banks and could invest only in safe assets; the Reconstruction Bank, which inherited all performing loans of the liquidated banks; and the Mongolia Asset Recovery Agency (MARA), which was set up to manage the non-performing loans that the government assumed from the banking system.

The government replaced principal and interest accrued on banks’ non-performing loans with non-negotiable “restructuring bonds” issued domestically from 1996 to 1997. These bonds were issued under local law, held domestically, and denominated in local currency (IMF, 1999; Moody’s, 2008). The government began defaulting on interest payments of restructuring bonds in January 1997 (IMF, 1999; World Bank, 1997).

Details on domestic debt restructuring

The default episode involved interest payable on restructuring bonds with a face value of around MNT 44 billion (US$ 56.33 million). These bonds initially featured a one-month maturity (with the assurance of future rollover), and an interest rate set monthly at a level slightly above the Mongolbank bill rate. In September 2001, when these bonds were restructured, their new maturity was set to five years, and their interest rates were linked to those of the 91-day Central Bank Bills plus a premium (World Bank, 2002; IMF, 2005).

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393 Those two banks represented the largest and fourth-largest Mongolian banks and accounted for around 50 percent of banking system assets.
394 The transfer of defaulted private banks’ deposits to the Savings Bank featured discrimination. Firms’ deposits in Ardyn Bank were written down by 20 percent before the transferal, whereas those ones in Insurance Bank by 50. However, households’ deposits were not written down (Enoch, Gulde and Hardy, 2002).
395 Both Savings and Reconstruction banks were publicly owned.
396 These bonds were issued in the domestic bond market (World Bank, 1997)
397 In the first half of 1997, the monthly interest rate was set at 4 percent (Enoch, Gulde and Hardy, 2002; Asian Development Bank, 1997).
Additionally, in the same month, MNT 2.1 billion (US$ 2.69 million) of accumulated interest on these bonds was finally paid to creditors. Since then, payments resumed regularly (World Bank, 2005).

398 MNT 35 billion were issued in 1996 (MNT 8.9 billion to the central bank, MNT 20.5 billion to the Savings Bank, and MNT 5.6 billion to the Reconstruction Bank) and MNT 9 billion in 1997. According to the IMF (1999), the amount issued in 1997 was MNT 10 billion instead. According to the Asian Development Bank (1997), the government issued MNT 44.5 billion of bonds, of which MNT 37.4 was used to cover nonperforming assets and MNT 7.1 was used to take over directed and inherited loans of commercial banks. Given the discrepancy in the reported values, we report the most conservative value of MNT 44 billion in the dataset. The dollar amount is computed using the 1997 exchange rate of LCU 790 per U.S. dollar (IMF, 2002).

399 We consider 2001 as the end date of the episode. By the end of 2004, outstanding restructuring bonds amounted to MNT 9 billion. On February 21, 2005, as a part of the borrowing program approved by the Parliament, the government decided to replace them with discounted Treasury bills with an annual interest rate set between 12.5 and 17 percent (World Bank, 2005).
References


Nicaragua (1994)

Framing the crisis

In February 1993, Nicaragua began to issue domestic-law bonds called *Bonos de Pago de Indemnizacion* (BPIs) to compensate land owners that were expropriated during the Sandinista regime (IMF, 2006; European Commission, 2007; World Bank, 2008).\(^{400}\) BPIs were denominated in U.S dollar, featured a 20-year maturity, and paid a 3 percent coupon upon maturity.\(^{401}\) Due to their large volume and their denomination in foreign currency, BPIs quickly became a major source of vulnerability for Nicaraguan finances.\(^{402}\)

Over the years, the Nicaraguan government changed the legal terms of BPIs several times both unilaterally and with the agreement of investors.

Details on domestic debt restructuring

In July 1994, domestic authorities amended the terms of C.$. 500 million (US$ 74.37 million) of Series A BPIs by law.\(^{403}\) Maturity was reduced to 15 years, while the interest rate was set to 3 percent for the first two years, 4.5 percent for the following five years, and 5 percent for the remaining years (Buenas Tareas, 2012; IMF, 2004; World Bank, 2003; 2008). Principal was scheduled to be paid in five equal installments starting from year 11 (World Bank, 2003). Interests for the first 24 months were to be capitalized and paid in the last five years together with the principal. Starting from month 30, interests were set to be paid semi-annually. Earnings were also made tax exempt.\(^{404}\)

In May 1995, decree law N.21-1995 amended BPIs terms once again, allowing paper titles (“Cupones de intereses”) to replace cash for interest rate payments. Such paper titles could be used to pay debt with the tax authority and other public institutions at par.

In December 1996, Nicaragua exchanged existing debt securities with new ones that could fit into the Brady Plan and become tradable.\(^{405}\) The exchange was voluntary and targeted Series A BPIs amounting to US$ 650 million (see decree law N.17-1996). In exchange, Nicaragua offered standardized bonds of series B (US$ 100.94 million), C (US$ 146.24 million), D (US$ 119.66 million), E (US$ 161.51 million), F (US$ 121.65 million).\(^{406}\) Bonds issued between February 1993 and January 1994 were exchanged for Series B bonds maturing in

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\(^{401}\) According to decree law 56-1992 and 33-1992, the bonds were backed by State’s assets and featured a clause “cláusula del Mantenimiento” that kept the face values of bonds linked to the U.S. dollar at the official exchange rate. The bonds could be used at par to purchase public assets or to clear debt arising from the privatization process. Payments were to be done upon presentation of the paper at the Tesorería General de la República in Managua.

\(^{402}\) In order not to jeopardize public coffer, the law put a cap of U.S. $850 million on the outstanding stock of compensation debt that could be issued (World Bank, 2003).

\(^{403}\) See decree law N.180-1994. Volumes are computed using the exchange rate of 6.723 LCU per U.S. dollar.

\(^{404}\) See decree law N.12-1994.

\(^{405}\) The exchange aimed at providing creditors with debt securities featuring the standard characteristics and guarantees required by the international securities markets so that bonds could be listed more easily on any local or international Stock Exchange.

\(^{406}\) We did not find any information regarding the outcome of the exchange.

To facilitate transactions in international markets, another voluntary swap for Series A BPIs was undertaken in March 1999 (see decree law N.21-1999). Standardized bonds of Series B, C, D, E, F, G, H, and I were offered in exchange. Series B to F featured the same terms offered in 1996. Series G bonds maturing in February 2013 were exchanged for bonds issued between February 1998 and January 1999. Series H bonds maturing in February 2014 were exchanged for bonds issued between February 1999 and January 2000. Series I bonds maturing in February 2015 were exchanged for bonds issued between February 2000 and January 2001. The decree law set the maximum amount of bonds to be exchanged to US$ 650 million.

Series B bonds were evaluated at the exchange rate of C$. 6.0362 per U.S. $; Series C bonds at C$. 6.3517 per U.S. $; Series D at C$. 7.1139 per U.S. $; Series E at C$.7.9675 per U.S. $; Series F at C$.8.9264 per U.S. $.

We did not find any information regarding the outcome of the exchange.
References

Buenas Tarea (2012). Bonos, October.
https://www.buenastareas.com/ensayos/Bonos/6079385.html


https://openknowledge.worldbank.org/handle/10986/8090?show=full
Framing the crisis

From 1999 to 2001, Nicaragua experienced a banking crisis (Dijkstra, 2008; Shah and others, 2007). Ultimately the National Central Bank of Nicaragua had to intervene to rescue the failing domestic banking sector.\textsuperscript{409} Certificados Negociables de Inversion (CENI bonds) were issued to finance the purchase of distress assets of four distressed banks—Banpro, Banic, Banco de Café, and Banco Mercantil—and to compensate investors for their losses (Envio, 2005; 2006; Acevedo, 2005).\textsuperscript{410} CENI bonds were denominated in U.S. dollars and payable in local currency (cordobas), and they were purchased by a small number of domestic banks (Moody’s, 2017). The generous coupon offered by CENI bonds (up to a 21 percent annual fixed rate, payable semi-annually) weighed significantly on governments’ debt servicing costs, that increased by $400 million from 2001 to 2003.\textsuperscript{411} In an attempt to reduce the debt-serviceing burden, the government launched a domestic debt restructuring program in 2003.

Details on domestic debt restructuring

The restructuring program, involving CENI bonds worth US$ 320 million, was announced in June 2003, and completed in just one month. As part of the restructuring exercise, maturities were extended from 5 to 10 years and interest rates were reduced from 15.3-21 percent to 8.3-10 percent. The nominal value of bonds, however, remained unchanged (Moody’s, 2013, 2014, 2017). One hundred percent of the debt involved was exchanged, all of which was held by two domestic banks (Acevedo, 2005; Moody’s, 2014).

Nicaragua faced problems also on other domestic debt instruments. In August 2003, a decision by a Belgian court attached payments made by Nicaragua on BPIs (IMF, 2006; European Commission, 2007; World Bank, 2008).

The decision by the Belgian court froze interest payments made through Euroclear, requiring proportional debt-service payments to a claimant named LNC Investment Inc (Revista de temas nicaragüenses, 2009).\textsuperscript{412} As a result, Nicaragua accumulated US$ 1.8 million of overdue interest payments due in August to non-resident BPIs’ holders.\textsuperscript{413} In February 2004, overdue payments rose to US$ 4.2 million, including US$ 0.2 million in late amortization payments (IMF, 2004). In March 2004, the sentence was overturned on appeal in

\textsuperscript{409} At the time, the president of the Central Bank, the Treasury Minister, and other members of the cabinet had significant private interests in the domestic banking sector (Envio, 2005; 2006).

\textsuperscript{410} In 2000, as a result of the agreement between the government and Banpro (a private Nicaraguan bank), Banpro bought an insolvent private Nicaraguan bank, Interbank, under very favorable conditions and, in addition, received CENI bonds from the central bank as compensation for potential losses. Similar deals were proposed for the other four bankrupt banks (Jacobs, 2009).

\textsuperscript{411} This is a significant amount considering that the average annual budget for Nicaragua was around U.S. $929 million from 2002 to 2004 (Jacobs, 2009).

\textsuperscript{412} In 2001, Nicaragua signed an agreement with Deutsche Bank to make BPIs tradable internationally. The bonds were to be deposited in the Nicaraguan Treasury for registration in Euroclear (Revista de temas nicaragüenses, 2009; Dille, 2012).

\textsuperscript{413} This non-payment triggered the IMF’s lending into arrears policy (IMF, 2004).
the Court D' Appel de Bruxelles and Nicaragua managed to clear the overdue payments (Bratton, 2010; IMF, 2004a). \footnote{Payments were made from a special account in Nicaragua, where the authorities had set aside the necessary funds (IMF, 2003; 2004; 2004a).}
References


https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=1052&context=facpub

Buenas Tarea (2012). Bonos, October.
https://www.buenastareas.com/ensayos/Bonos/6079385.html


http://etheses.lse.ac.uk/481/1/Dille_III%20fares%20the%20land.pdf


Ministerio de la Hacienda y Crédito Publico Intendencia de la Propiedad (2002). Informe Estadistico, Julio, Managua.


https://openknowledge.worldbank.org/handle/10986/8090?show=full
Nicaragua (2008)

Framing the crisis

From 2003, Nicaragua enjoyed debt relief through the Initiative for Heavily Indebted Poor Countries (HIPC), the program launched by the IMF and World Bank in 1996 aiming to ensure that no poor country would face an unmanageable debt burden (IMF, 2004). The HIPC wrote off a large portion of Nicaragua’s foreign debt and interest payments declined to US$ 98 million. According to the HIPC’s principle of additionality, savings on foreign debt servicing costs should have financed additional spending on poverty alleviation programs. In the 2004 budget, however, money allocated to poverty reduction was reduced by US$ 7 million relative to the previous year despite declining debt servicing costs. Savings on foreign debt servicing costs were diverted towards the repayment of domestic public debt (Sida, 2004). In 2004, the Civil Coordinator (CC), an autonomous coordinating body of Nicaragua’s civil society sectors, accused the government of mismanaging the national budget. In particular, the CC highlighted that the projected tax income that was presented to the IMF was C$. 1.1 billion (US$ 69 million) greater than the projected tax income approved by the National Assembly and claimed that the missing amount had been transferred to the Central Bank to pay domestic debt.

In 2005, the Comptroller General’s Office (CGR) opened an internal audit to inspect the large payments that banks were receiving from the government for their holdings of CENIs. The central bank and the owners of banks receiving CENIs were suspected of collusion, as payments were much larger than the asset portfolios of the bankrupted banks estimated at roughly US$ 100 million. By the end of 2005, Nicaragua had paid over US$ 285 million to CENI bond holders, and additional disbursements of US$ 326 million were scheduled for the next seven years. As a result of this investigation, the CGR defined CENI bonds “illegal”.

Pressures to discontinue debt service of CENI bonds increased after the Frente Sandinista de Liberación Nacional (FSLN) socialist party took power in 2007 and began referring to CENIs as the “robbery of the century.” The central bank, however, refused to stop payments, arguing that the costs of a default would outweigh the benefits. Ultimately, political pressure triggered a debt restructuring in June 2008 (Jacobs, 2009).

Details on domestic debt restructuring

The CENI bond restructuring was announced in April 2008 and implemented in June. It affected bonds worth US$ 295.7 million. The maturities of the bonds were extended from 10 to 20 years, and interest rates were cut from an 8.3 to 10 percent range to 5 percent. Moody’s (2017) estimates that the exchange resulted on average

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415 According to Envio (2006), when Minister Montealegre negotiated the agreement with the IMF, which paved the way for the 2003 restructuring, he got the Fund to agree that paying domestic debt should be a priority, including by using the HIPC funds.

416 The Civil Coordinator is an autonomous body made up of unions, federations, associations, foundations, cooperatives, regional networks, social movements, and networks working on specific national issues and individuals (Envio, 2007).

417 The terms of the bailouts also came under scrutiny. The value of Interbank’s loan portfolio was estimated artificially low. As a result, Interbank’s loan portfolio was sold for 30 percent less than its real value (Jacobs, 2009; Envio, 2006).

418 According to the Comptroller’s investigation, the board of directors of the central bank sold the CENIs to Bancentro (the major buyer) for less than their market value (Letters, 2007).
in a 50 percent NPV loss. Only two domestic banks held CENI bonds, Banpro and Bancentro (Moody’s 2014, 2017). The participation rate was 100 percent.
References


Framing the crisis

Highly volatile and oil price dependent fiscal revenues together with procyclical government expenditures made Nigeria’s fiscal framework very vulnerable (World Bank, 1996). Periods of high oil prices and high fiscal revenues, were accompanied by high government expenditures, that were difficult to compress in periods of low oil prices. Additionally, revenue-sharing arrangements, between the State and local governments, facilitated the expansion of expenditure programs, further constraining the authorities’ ability to stabilize the budget (IMF, 2003). Declines in government revenue were offset with borrowings from the central bank using ways and means advances. Liquidity management was also problematic. Given the resistance of market participants to absorb long-term debt, authorities had to resort mostly on short-term domestic debt to fund deficits, exposing the sovereign to rollover risk (IMF, 2004; Asogwa and Ezema, 2005). These practices together with the practice of issuing new treasury bills and treasury certificates to pay holders of maturing debt instruments led to a rapid growth of the debt stock generated debt servicing difficulties (Asogwa and Ezema, 2005).

In 1995, the Nigerian government introduced a plan to tighten fiscal policy and restructured domestic debt to reduce its domestic debt service.

Details domestic debt restructuring

In 1995, the federal government decided to convert N23.32 billion (U.S $ 1.07 billion) outstanding Treasury certificates into non-tradable Treasury bonds denominated in local currency. The central bank held 76.6 percent of them. The measure entered into force with effect from March 11, 1996. As a result, Treasury certificates were discontinued (Asogwa and Ezema, 2005).

Nigeria also accumulated domestic arrears. As of 1999, unpaid claims amounted to N32 billion, mostly toward federal government national priority-projects and pensions (IMF, 2003). An audit for contractor (in excess of N1 billion) and pension arrears was concluded in February 2006 (IMF, 2006). Contractor arrears amounted to N275 billion (US$ 2.81 billion) and authorities planned to repay them either in cash or through bonds, depending on their size. In accordance to the plan, the government cleared N91.7 billion (US$ 936.67 million) of arrears in 2006 through the issuance of FGN special purpose bonds featuring 5-year maturity and between

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419 As reported by IMF (1998), public finance in Nigeria has historically been opaque and complicated by several off-budget funds and accounting practices that resulted in an underestimation of the actual size of public expenditure.

420 Domestic debt was mainly made of Treasury bills, Treasury certificates, Treasury bonds, and government stock. Treasury certificates featured a maturity between one and two years and were considered as an instrument in between Treasury bills (short-term instruments) and long-term government stocks (Asogwa and Ezema, 2005).

421 According to IMF (2004), authorities under looked the implications of risky debt structures and the extensive reliance on non-market sources of financing on macroeconomic stability and the functioning of financial markets.

422 Amounts in U.S dollar are computed using an exchange rate of LCU 21.89 per U.S. $ (Asogwa and Ezema, 2005).

423 Arrears smaller than N100 million were to be paid by cash (IMF, 2006). The government decided to pay first the smaller contractors’ arrears and then the larger ones (IMF, 2005).
10.98 and 16 per cent interest rate (IMF, 2005; DMO, 2020; Central Bank of Nigeria, 2008). Pension arrears amounted to N100 billion (US$ 1.02 billion) and the government cleared N75 billion (US$ 766.09 million) of them through the issuance of FGN special purpose bonds in 2006 featuring a 3-year maturity between 10.98 and 16 per cent interest rate (IMF, 2006; DMO, 2020; Central Bank of Nigeria, 2008). Final bond issuances to clear remaining arrears occurred in April 2007 (IMF, 2006; 2007; 2007a).

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424 Amounts in U.S dollar are computed using an exchange rate of LCU97.9 per U.S. $ (IMF, 2009).

425 Pension arrears were cleared after the establishment of a database of pensioners (IMF, 2006).
References


——— (2009). “Nigeria: 2009 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; Statement by the IMF Staff Representative; and Statement by the Executive Director for Nigeria”. Country Report 09/315, pp. 28, November.

Pakistan (1998)

Framing the crisis

Despite the rapid economic expansion of the 1990s, Pakistan’s economy featured structural weaknesses. In particular, the narrow revenue base, the inefficient tax administration, large defense expenditures, and rising interest payments contributed to maintain the fiscal deficit well above 5 percent of GDP from 1993 to 1999. Due to fiscal profligacy, the debt-to-GDP ratio increased markedly reaching 92 percent in 1999, with bilateral creditors and multilateral agencies owning a large fraction of it.

In May 1998, Pakistan carried out a series of nuclear tests. In retaliation G-7 countries imposed international sanctions and multilateral agencies suspended their financial assistance (ADB, 2000). As official creditors stopped lending to Pakistan, international investors also rushed to reduce their exposures to Pakistan withdrawing foreign currency-denominated deposits (FCDs). In an attempt to stop the capital flight, Pakistan introduced capital controls in May, which included a freeze on FCDs for both residents and non-residents (IMF, 2002, 2010; Moody’s, 2008).

The outflow of foreign exchange reserves combined with withering capital inflows and remittances put the exchange rate under pressure, leading to a devaluation of the currency in June 1998 as part of an emergency package that also included cuts to fiscal subsidies and reductions in planned expenditures (IMF, 2010; Armas, Levy Yeyati, and Ize, 2006; State Bank of Pakistan, 1998).

Despite the austerity measures, debt remained unsustainable. By the end of the 1990s, short-term debt accounted for 20 percent of total debt, and far exceeded foreign exchange reserves. Additionally, interest payments absorbed almost 50 percent of government revenues, with external debt servicing amounting to almost 13 percent of GDP. In this context, the government began accumulating arrears on its official bilateral debt, while remaining current with private creditors. By the end of 1998 arrears toward foreign official creditors amounted to US$ 1.6 billion (Diaz-Cassou et al., 2008; IMF, 2006). In January 1999, Pakistan reached an agreement with its official creditors through the Paris club, to restructure its official debt. In December 1999 Pakistan also restructures its external private (Diaz-Cassou et al., 2008).

Details of domestic debt restructuring

On May 29, 1998, the government introduced a temporary freeze on securities denominated in foreign currency (including the so-called Foreign Exchange Bearer Certificates and Dollar Bearer Certificates) and FCDs, which were largely non-resident owned (Bhatia, 2002; IMF, 2001, 2002; Moody’s, 2008). The amount involved in the freeze was US$ 11.3 billion: US$ 79 million in foreign currency domestically issued securities held by domestic retail investors, including Foreign Exchange Bearer Certificates (FCBCs), Foreign Currency Bearer

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426 The freeze marked the end of a preferential treatment previously provided to FCDs (IMF, 2010; Kokenyne, Ley, and Veyrune, 2010).
427 Straight after the currency devaluation of June 1998, Pakistan introduced a dual exchange rate system with a free interbank rate and an official rate applied to a narrow set of transactions (Diaz-Cassou et al., 2008).
429 The freeze also affected state-owned banks (IMF, 2002).
Certificates (FCBCs), and Dollar Bearer Certificates (DBCs); US$ 7.3 billion in FCDs held by residents; and around US$ 4 billion in FCDs held by non-residents (Bhatia, 2002; IMF, 2001; State Bank of Pakistan, 2000). On May 30, depositors were allowed to either withdraw from their deposits but in domestic currency (at the rate of 46 rupees per dollar, against an official rate of 44.05/44.49), or to convert them for the so called Special U.S. Dollar Bonds (Moody’s 2008; IMF, 2010, 2002; Kokenyne, Ley, and Veyrune, 2010; Khawaja, 2007). The Special U.S. Dollar Bond scheme was launched on July 21 1998 and offered three-, five-, and seven-year U.S. dollar-denominated instruments featuring interest payable semiannually at, the LIBOR rate plus 1 percent, 1.5 percent, and 2 percent respectively (State Bank of Pakistan, 2000). As reported by the Government of Pakistan (2002), US$ 1.4 billion of frozen foreign currency accounts (FCDs, FCBCs, and DBCs) were exchanged for Special U.S. Dollar Bonds (State Bank of Pakistan, 1998). While deposits were officially unfrozen in December 1998, a partial freeze remained in place until the end of 2000 (Moody’s, 2008).

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The deposit freeze discriminated between different deposit holders. Foreign oil and gas companies, foreigners employed by diplomatic missions, and international agencies were exempt from the freeze (Reuters, 1998). The government also reached a separate agreement with non-resident institutional investors on a “more favorable” repayment schedule for US$ 1.4 billion of FCDs (IMF, 2001).

Bank loans were involved in the default too. By July 1998, US$ 1.4 billion in bank loans were in default (Bhatia, 2002). US$ 777 million were foreign bank loans while US$ 623 million were domestic bank loans (Cruces and Trebesch, 2013; IMF, 2012). Information on the restructuring on bank loans is not available. We consider the signature of the ‘Pakistan Trade Maintenance Agreement’ in December 1999 as the end-date for the default on bank loans (Bhatia, 2002).

In January 1999, Pakistan agreed to reschedule US$ 3.25 billion of official debt with bilateral creditors. Official debt which included accumulated arrears and debt falling due in 1999 and 2000, was rescheduled over 18 years and with a three-year grace period under the Paris Club framework (ADB, 2000; Diaz-Cassou, et al., 2008; Moody’s, 2017). In May 1999, Pakistan also started negotiating with private creditors for a voluntary restructuring of Eurobonds falling due from December 1999 to February 2002, as requested by the comparability of treatment clause included in the Paris Club agreement (Chuham and Sturzenegger, 2003; IMF, 2002, 2006; Moody’s, 2008). The government launched the debt exchange offer for private creditors on November 15, 1999, and completed the restructuring exercise with a 99 percent participation rate on December 13 of the same year (Diaz-Cassou, et al., 2008; IMF, 2002; Moody’s, 2014; Sturzenegger and Zettelmeyer, 2017).

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430 The exchange of 46 rupees per U.S. dollar applied to conversions implemented before September 1, 1998 (Reuters, 1998).
431 Those bonds and the related interest were exempt from the wealth tax and tax for residents in Pakistan (Xinhua News Agency, 1998; Pakistan Press International, 1999).
432 Although the opening of new FCDs was allowed, the preferential tax treatment of FCDs was discontinued (IMF, 2010, 2002).
433 The State Bank of Pakistan considered withdrawal requests by foreigners working in the country on a case-to-case basis (Reuters, 1998).
434 The rescheduling occurred in March 1999 (Moody’s, 2017).
The restructuring involved three U.S. dollar-denominated Eurobonds amounting to US$ 610 million: a US$ 150 million bond with an 11.5 percent coupon and maturity in December 1999; a US$ 300 million bond paying LIBOR plus 3.95 percent and maturing in May 2000; and a US$ 160 million convertible bond with an 11.5 percent coupon, which was set to mature in February 2002 and featured a put option in February 2000 (Chuham and Sturzenegger, 2003; Moody’s, 2017; State Bank of Pakistan, 2000). According to the IMF (2002), residents held one-third of the restructured debt, of which domestic banks held 11 percent. Pakistan offered a single U.S. dollar-denominated amortizing bond in exchange for the old bonds. The new bond featured a six-year maturity, a 10 percent coupon payable semi-annually, a small nominal increase in principal (US$ 623 million), and a three-year grace period on principal repayments (Diaz-Cassou, et al., 2008; Chuham and Sturzenegger, 2003; Sturzenegger and Zettelmeyer, 2005). The first principal payment was due in December 2002. 

435 Pakistan was the first country ever to restructure Eurobonds. Several factors contributed to the success of the debt restructuring. First, the limited volume of debt and the number of bondholders (mostly institutional) involved facilitated the negotiating process (Chuham and Sturzenegger, 2003). Second, the exchange produced relatively moderate NPV losses, which ranged from 29.8 to 33.3 percent (Sturzenegger and Zettelmeyer, 2005). Third, the rating Standard & Poor’s applied to the new bond was better than that for the old bonds. Fourth, the decision not to use the collective action clauses avoided calling a bondholders’ meeting in which opposition to the restructuring could have appeared (Diaz-Cassou, et al., 2008; IMF, 2012).

436 The first principal payment was due in December 2002.
References


Panama (1988)

Framing the crisis

In June 1987, Panamanian general Roberto Diaz Herrera publicly accused General Manuel Noriega, de facto ruler of Panama, of election fraud, drug trafficking, and political assassinations. Nationwide protests soon turned into disquiet in the financial sector and some bank runs. Deposits declined from US$ 32.9 billion in March 1987 to US$ 24.4 billion in December.

Political and financial tensions escalated further when Noriega loyalists thwarted President Eric Delvalle’s attempt to remove Noriega from power in February 1988. The tensions ultimately triggered a full-scale bank run, which forced many banks to close.

On March 1, 1988, Panamanian banks asked the National Banking Commission for permission to remain closed, arguing they could not survive given the current pace of withdrawals (Zimbalist and Weeks, 1991). Two days later the government introduced a general deposit freeze on U.S. dollar-denominated deposits. The freeze applied to public domestic banks (the National Bank of Panama and Savings Bank), private domestic banks, and local subsidiaries of large international banks (New York Times, 1988; IMF, 1996). While initially limited to time deposits, the freeze eventually broadened to include demand and savings deposits (Erlich, 1992; IMF, 2006a). 437

During the crisis, the government also accumulated domestic arrears to suppliers, wages, and civil as well as military pensioners (Gerling and others, 2017; Reinhart and Rogoff, 2010; Fernandez, Protasi, and Vogel, 1991).

Details on domestic debt restructuring

Panamanian banks held US$ 1,889.4 million in frozen deposits, which were composed of US$ 1,155.2 million in time deposits, US$ 434.9 million in savings deposits, and US$ 299.3 million in demand deposits. 438 Time deposits were held predominantly by foreigners (Reuters, 1990). Information on the composition of the holders of the other types of deposits is lacking. Depositors were permitted to withdraw up to 10 percent from their savings accounts (Guerrero, 1990). In addition, exemptions to the freeze were granted for tax payments and intra-bank debt services. While deposit interests accrued normally during the freeze, interest rates were, on average, 100 basis points below the prevailing LIBOR rate (IMF, 2006a).

The government authorized banks to issue certificados de deposito de inversion (so-called CEDIs) in exchange for frozen deposits with an amount no smaller than PAB 10,000. Each certificate had a three-year maturity and negotiable interest rate and was issued in minimal amounts of US$ 1,000. 439 CEDIs could be used for all transactions (Zimbalist and Weeks, 1991; Gaceta Oficial Organo del Estado, 1988).

437 The U.S. dollar was the official currency used in Panama since 1904 (Moody’s, 2008). Therefore, following Moody’s methodology, we classify this episode as a foreign currency default.

438 These are the amounts reported in December 1988 (Fernandez, Protasi, and Vogel, 1991).

439 The balboa, the local currency, was only used as unit of account (Gaceta Oficial Organo del Estado, 1988).
The freeze on U.S. dollar-denominated deposits was repealed over time. Demand deposits were lifted on January 1, 1989, but depositors were permitted to withdraw only up to US$ 100. Savings deposits were unfrozen on April 25, 1990, followed by time deposits on July 10, 1990 (Zimbalist and Weeks, 1991; IMF, 2006a).

The government also accumulated domestic arrears worth US$ 107.9 million in 1988 and US$ 34 million in 1989.440 US$ 55 million were paid in 1992, but an additional US$ 35 million was accumulated in 1994 (IMF, 1998). The government mainly dealt with those domestic arrears in two ways. First, to pay public sector employees the government issued fractionated checks, which circulated as exchange instruments at a discount (Zimbalist and Weeks, 1991).441 Second, the administration that took office on September 1, 2004, developed a plan to reduce the unpaid arrears to domestic suppliers gradually (IMF, 2006a).

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440 The exchange rate between the balboa and the U.S. dollar was fixed at 1 to 1 (Fernandez, Protasi, and Vogel, 1991; World Bank, 2019).

441 The central government also issued bonds in 1988 and 1989 in lieu of payment in cash to employees for salary bonuses (IMF, 1998).
References


Panama (1998)

Framing the crisis

In 1994, a newly elected government took power and adopted a new medium-term program of economic reforms (supported by a stand-by arrangement with the IMF). The program’s main building blocks included debt restructuring, privatization, and trade liberalization. Debt restructuring targeting mainly the existing Brady bonds took place in three rounds between 1997 and 1998, only one of which involved domestic debt (IMF, 1999).

Details on domestic debt restructuring

The domestic debt restructuring was conducted in April 1998 when the government issued US$ 300 million of U.S. dollar-denominated bonds with a 10-year maturity with an 8.25 percent coupon to retire US$ 43.9 million in Brady bonds, and US$ 26.1 million of domestic debt for cash flow management purposes (IMF, 1999, 2001).442

442 The Brady bonds were originally issued in 1996.
References


In 2002, Paraguay went through a deep recession due to domestic vulnerabilities and external shocks. Real GDP dropped 4.5 percent, the local currency depreciated 34 percent against the U.S. dollar, and inflation peaked at 14.5 percent. The recession, together with the regional crisis of 2002, affected the Paraguayan banking system. In particular, the collapse of the third-largest bank, Banco Aleman, resulted in a deposit run and capital flight (IMF, 2003, 2004). With presidential and congressional elections scheduled in 2002, political uncertainty posed an obstacle to adopting adjustment policies (IMF, 2003). The fiscal situation deteriorated rapidly due to short-sighted debt management and the additional burden of contingent liabilities in the banking sector (Mercer-Blackman, 2005). By the end of 2002 the debt-to-GDP ratio reached almost 50 percent and, starting in December 2002, the government began to miss payments on maturing domestic Treasury bonds (IMF, 2003, 2004, 2005; Mercer-Blackman, 2005; Moody’s, 2008).

Details on domestic debt restructuring


The debt exchange was implemented in two phases. The first exchange occurred from July 23 to August 9, 2004 (IMF, 2005; Moody’s, 2014). During the process, the government cleared all interest arrears accumulated on bonds as they were presented for the exchange. The interest on bonds not yet presented for exchange were instead deposited in an escrow account at the central bank (IMF, 2005). The second exchange was implemented at the end of June 2005, and raised the participation rate to 96 percent (IMF, 2006b, 2008; Moody’s, 2014).

Old bonds (*Bonos Viejos*) were exchanged for five new U.S. dollar-denominated bonds (*Bonos Nuevos*).
1) US$ 9 million of *Bonos del Tesoro de Septiembre 2004* with a 7 percent coupon;  
2) US$ 21 million of *Bonos del Tesoro Marzo de 2005* with a 7 percent coupon;  
3) US$ 34 million of *Bonos del Tesoro Marzo 2006* with an 8 percent coupon;  
4) US$ 40 million of *Bonos del Tesoro Marzo de 2007* with a 9 percent coupon;  
5) US$ 34.11 million of *Bonos del tesoro Marzo de 2008* with a 9.5 percent coupon (IMF, 2008; Republica del Paraguay, 2003).  

The restructuring exercise did not envisage any reduction of the nominal value of bonds. Yet maturities were increased by three years and coupons were reduced (Sturzenegger and Zettlemeyer, 2007). Past-due interest payments were paid in cash (IMF, 2008). On net, NPV loses for creditors were estimated at 8 percent (Moody’s, 2013). The operation did not discriminate across creditors (Republica del Paraguay, 2003).
References


Peru (1985)

Framing the crisis

A prolonged period of high inflation turned Peru into a dollarized economy (De la Rocha, 1998). In 1985, more than 70 percent of the private sector’s financial assets were denominated in foreign currency (Lago, 1991). On July 28, 1985, the newly elected President García announced that Peru would only pay a portion of its foreign debt every year and that portion would not exceed 10 percent of the value of exports. Additionally, with annual inflation reaching 163.4 percent in 1985, the government announced measures to bring inflation under control. These measures included freezing most wages and prices, devaluating the currency by 25 percent, and increasing import tariffs. The government also introduced controls on the foreign exchange and foreign currency-denominated bank deposits to preserve foreign reserves (Moody’s, 2008). On July 30, 1985, the government declared a bank holiday to avoid the withdrawal of U.S. dollar deposits and announced its intention to prohibit transactions in U.S. dollars (Moody’s, 2008).

Details on domestic debt restructuring

A three-month deposit freeze, which involved both public and private banks, started in August 1985, followed by partial restrictions for another six months until April 30, 1986 (Moody’s, 2008; Fischer, 1988; Martinelli and Vega, 2018). U.S. dollar-denominated deposits were forcibly converted into local currency at the official exchange rate of LCU 13.94 per U.S. dollar plus a 3 percent premium (Moody’s, 2008; Reinhart and others, 2003; Lago, 1991). The amount involved in the operation was US$ 1.37 billion, around 60 percent of all deposits at the time (Moody’s, 2008). In 1988, foreign currency deposits were allowed again (Moody’s, 2008; Reinhart and Rogoff, 2011).

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449 The high inflation rates in the 1980s resulted in persistently negative real rates on local currency-denominated deposits. At the same time, foreign currency-denominated deposits yielded positive returns (Fischer, 1988).

450 Due to chronic inflation, Peru’s currency, the sol, was replaced by the inti in 1985.

451 Foreign currency-denominated deposits could be used to make payments abroad or to buy new certificates of deposit at maturity (Moody’s, 2008).

452 Own computation based on data from the Federal Reserve Bank of St. Louis.
References


Peru (1992)

Framing the crisis

In June 1969, Peruvian dictator Juan Velasco Alvarado implemented the Ley de Reforma Agraria (Decree Law No. 17716). The reform included the expropriation of rural lands with the aim of addressing inequality. Around 23 million acres of land were redistributed from large owners to small farmers organized in cooperatives (Moody’s, 2015). 15 percent of the compensation value was settled in cash. The remaining 85 percent was settled through the issuance of a domestic-law bearer instrument called Bonos de la Deuda Agraria (BDAs). The face value of BDAs amounted to 13.28 billion soles de oro, which was the local currency used at the time (Blommestein, 2017; Moody’s, 2015). On average, the compensation paid to landowners was less than one-tenth of the prevailing market value of the land (Porzecanski, 2016; Coffe, 2016).

Beneficiaries of the expropriated land were expected to pay predefined installments for their plot to the Banco Agrario, that was also responsible for paying BDAs holders. Holders of BDAs had to present the coupon cut-out in person to Banco Agrario, which in turn requested the payments from the Ministry of Economy and Finance (Moody’s, 2015; Coffe, 2016).

In 1988, inflation spiraled out of control, reaching 667 percent on an annual basis (Edwards, 2016). In 1991, Peru abandoned its currency, the inti, for the nuevo sol. Inflation and currency substitution made BDAs worthless, as BDAs’ terms did not specify any form of indexation to inflation nor allowed for currency substitution (HR Ratings, 2015; Moody’s, 2015). On May 6, 1992, the government liquidated Banco Agrario through Decree Law No. 25478 and defaulted on BDAs (Cross, 2016; Porzecanski, 2016; Coffe, 2016; Egan-Jones, 2015a, 2015b; Blommestein, 2017; Petición de ABDA, 2015).

Details on domestic debt restructuring

Bonos de la Deuda Agraria were denominated in local currency and issued in three different classes:

1) Class A with a 20-year maturity and 6 percent coupon;
2) Class B with a 25-year maturity and 5 percent coupon;

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453 According to the Law, up to 15 billion soles oro could be used for compensation (Moody’s, 2015). The last issuance of these bonds occurred in 1982 (HR Ratings, 2015).

454 By using the prevailing exchange rate of 38.7 LCU per U.S. dollar, the amount corresponded to U.S. $343.3 million (HR Ratings, 2015; Moody’s, 2015).

455 Due to financial difficulties, several land beneficiaries were no longer able to meet their obligations. In November 1979, the government forgave their debt through a decree law. This undermined Banco Agrario’s ability to pay the holders of BDAs (Porzecanski, 2016).

456 In 1985, Peru moved from the sol oro (the currency of denomination of the BDAs) to the inti, with 1 inti set to equal 1,000 soles oro. After a second currency change, the nominal equivalent of one sol de oro corresponded to 0.000000001 nuevos soles.

457 Reinhart and Rogoff (2011) use the hyperinflation episode of 1989 as the starting date of the episode.

458 The class was chosen according to the type of land expropriated (Comision agrarian, 2005). All three classes of bonds featured an unreserved government guarantee (Coffee, 2016; Egan-Jones, 2015b). See Decree Law No. 17716 art. 175.
3) Class C with a 30-year maturity and 4 percent coupon (Moody’s, 2015; HR Ratings, 2015; Egan-Jones, 2015; Cross, 2016).

Following the 1992 default, the resolution of outstanding BDAs is still ongoing (Moody’s, 2015). Peru tried in different occasions to establish a legal framework to determine the “proper” value of BDAs without success (White and Case, 2018). The Congress of Peru also suggested several methods to determine the value of those bonds (White and Case, 2018).

In March 2001, Peru’s Constitutional Tribunal (TC) issued a ruling forcing the government to compensate (on an actuarial basis) the BDA bondholders to account for hyperinflation and the currency change. However, the ruling did not specify the process for updating the value of the bonds, which led to a lengthy debate. In 2006, a study from the Congress of Peru quantified the required payment at US$ 3.46 billion. In 2011, the Congress passed a bill authorizing payments using a consumer price index methodology, but neither President Garcia nor his successor, President Humala, signed the bill (members of Humala’s party called it a fiscal “time bomb”). Years of longstanding legal uncertainty ended on July 16, 2013 when the TC issued an enforceability declaration of its 2001 ruling, which mandated the government to determine the value of the bonds, and to design the administrative process for paying back bondholders (White and Case, 2018). To implement the 2013 decision, in January 2014, the government issued two decrees (N° 017-2014-EF and N° 019-2014-EF) defining the formula to update the value of outstanding BDAs and the administrative regulations for the bondholder process repayment. The formula was based on a “dollarization” method, and met fierce opposition from bondholders, as it implied payments that were only a small fraction of the outstanding debt value computed on an actuarial basis (HR Ratings, 2015; Porzecanski, 2016; Cross, 2016).

In August 2017, the Supreme decree N° 242-2017-EF consolidated prior decrees in a single, unified text to clarify the bondholder process for all stakeholders in which creditors could participate through January 19, 2019 (Republic of Peru, 2016). According to the decree, bondholders could choose between four repayment options (sovereign bonds, land owned by the State, cash, or investment in State sectors) or a combination of the four. Additionally, the decree introduced a discriminatory treatment for bondholders differentiating their payment priority on the basis of their age, whether they were the original or secondary holder, natural persons or juridical entities, non-speculative or speculative investors (White and Case, 2018). Such discrimination had not been incorporated into the original terms of the bonds. In 2018, the Ministry of Economy and Finance started paying the verified bonds and it is still in the process of doing so (Embassy of Peru, 2020).

459 See Decree Law N° 17716, Land Reform Act, Article 174, 173, and 175.
460 As of 2005, the congressional Committee on Agrarian Affairs reported that BDAs amounting to 2,522 billion soles de oro were still in circulation (Porzecanski, 2016; Blommestein, 2017).
461 According to the dollarization method, the outstanding value of BDAs must be indexed to the U.S. dollar and apply the interest rate on U.S. Treasury bonds (Moody’s, 2015). The dollarization method departed from the CPI methodology, which was instead rejected and not considered a realistic measure during periods of severe economic crisis (White and Case, 2018).
463 Priority was set as follows. First, persons who are original bondholders (or heirs) and are 65 years or older. Second, natural persons who are original bondholders (or heirs) and are younger than 65. Third, natural persons who are not original bondholders and are 65
The July 2013 Resolution was subject to extensive criticism. *Alianza por el Pago Justo de los Bonos Agrarios* (an association of BDAs holders) pushed for the adoption of a methodology based on the consumer price index. By using the dollar-based methodology suggested by the TC, Moody’s (2015) estimated a value of around US$ 500 million for the outstanding BDAs. According to the CPI methodology, the value would instead rise to US$ 5.1 billion.\(^{464}\) Additionally, in 2015, criminal charges were brought against the TC for forgery related to documents in the 2013 ruling. The charges point to a manipulation with whiteout of the original majority opinion that would have updated the bonds using the CPI methodology (PR Newswire, 2015; Porzecanski, 2016). The allegations were confirmed, but the investigation did not question the validity of the July 2013 Resolution, which had been confirmed by the TC in other resolutions. As a result, the July 2013 Resolution remained binding under Peruvian law (White and Case, 2018).

Gramercy Funds, which bought about 20 percent of BDAs in the secondary market from 2006 to 2008 for U.S $31 million, filed a US$ 1.6 billion claim against Peru in June 2016 under the U.S.-Peru Trade Promotion Agreement. The aim was to undermine the July 2013 Resolution and the related bondholder procedure enacted by Peru (Dow Jones Institutional News, 2016a, 2016b; Edwards, 2016; White and Case, 2018).\(^{465}\) At the time of writing the case is still pending with the last hearing held in November 2020.

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\(^{464}\) In February 2015, former Peruvian Finance Minister Ismael Benavides claimed that the total amount of outstanding BDAs was around U.S. $5.1 billion (Gramercy Funds Management LLC, 2016). Given the uncertainty at the time of writing regarding the value of the bonds involved, we report the lower estimate of U.S. $500 million in the dataset.

\(^{465}\) Gramercy has alleged that the chief justice of the court used illicit means, such as forged signatures, to reverse the court’s previous position (Porzecanski, 2016; HR Ratings, 2015).
References


Embassy of Peru (2020). Peruvian Agrarian Reform Bonds, December. Peruvian Agrarian Reform Bonds — Embassy of Peru in the USA

Financial News (2016). “Hedge Fund Challenges Peru on Land Bonds; Tactics of Gramercy Funds Management Are Similar to Those Used by Funds in Argentina, Greece and Iceland,” January.


Russia (1998)

Framing the crisis

The economic situation deteriorated sharply in 1997, after the Asian financial crisis spilled over to Russia and the terms of trade worsened dramatically due to a sharp drop in oil prices. With foreign investors reducing their exposure to Russia, the Russian Treasury bill market dried up (IMF, 1999).

In 1998, Russian authorities responded to the crisis, tightening monetary policy in an attempt to complete fiscal reforms and secure the support of the international community. These measures, however, failed to restore investor confidence, and the ruble experienced several speculative attacks, which reduced Russia’s foreign exchange reserves. Due to the rising devaluation risk, the rollover of ruble-denominated short-term debt (mainly GKO) became increasingly difficult. To alleviate liquidity pressures, the government substituted high-cost ruble-denominated domestic debt for lower-yielding Eurobonds denominated in foreign currency in July 1998.

The IMF suspended its disbursements after the Russian parliament voted down a fiscal package, which aimed to comply with the conditionality attached to an IMF program signed in July 1998. This left Russia with no other option, but to default on its ruble-denominated domestically issued debt on August 17, 1998. The default affected both short-term treasury bills (GKO) and long-term bonds (OFZ). This decision shocked financial markets, as investors considered Russia “too big” (or “too nuclear”) to fail. On the same day, the government implemented a number of emergency measures, including a large currency devaluation of the ruble, a 90-day moratorium on private-sector payments on external liabilities (enforced through extensive capital and exchange controls), and the suspension of trading for all government bond issues in the secondary market (Central Bank of the Russian Federation, 1999).

Details on domestic debt restructuring

Prior to the August default, Russia had implemented a voluntary debt exchange in July 1998. The exchange swapped US$ 4.4 billion of domestically issued, local-currency denominated GKO for foreign-currency Eurobonds with maturities from 7 to 20 years (Das and others, 2012; Sturzenegger and Zettelmeyer, 2007; IMF, 1998, 1999). The new bonds were issued at a high spread, around 940 basis points above U.S. Treasuries (IMF, 1999). Almost 60 percent of the participants in the exchange were non-residents and the remainder Russian banks (Central Bank of the Russian Federation, 1999). At the time of the default, the

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466 This resulted in a shortfall in exports and a consequent reduction in federal budget revenues.
467 See the 1998 Federal Budget Law.
468 A few weeks later, Russia also defaulted on some components of its Soviet-era external debt.
469 The small-volume government savings loan bond market (OGSZ) continued to function beyond August, although no new issues were placed. The terms of servicing OGSZ bonds were not changed, and coupon payments and redemptions were made in time. The absence of a developed OGSZ secondary market prevented speculation and contributed to the stability of the market (Central Bank of the Russian Federation, 1999).
470 The participation rate of creditors was low, as only about one-tenth of the amount eligible (around U.S. $40 billion) was converted (Das and others, 2012; Herman, Ocampo, and Spiegel, 2010).
share of non-resident holdings of the GKO and OFZ market was about 30 percent (Central Bank of the Russian Federation, 1999).

Following the default in August 1998, a first restructuring offer was rejected on August 25, 1998. A restructuring agreement (the so-called *novation scheme*) was finally signed on March 24, 1999 (Sturzenegger and Zettlemeyer, 2007). The distressed exchange occurred in May 1999. It involved RUB 190 billion (US$ 30.4 billion), which represented all the ruble-denominated debt coming due from August 19, 1998 to December 31, 1999 (Moody’s, 2013). Domestic banks held most of the restructured debt while non-residents held the remainder (Sturzenegger and Zettlemeyer, 2005, 2007). Only domestic and foreign institutional investors were involved in the restructuring exercise. Households and pensions funds were not (Diaz-Cassou et al., 2008; IMF, 2002).

Under the new terms, the face value of bonds was reduced by 29 percent and maturities were extended from three to five years (Moody’s, 2013). Bondholders also accepted to have their scheduled payments discounted to August 1998 at a rate of 50 percent per annum (Sturzenegger and Zettlemeyer, 2007). Based on the adjusted nominal claims, creditors received a combination of cash, short-term instruments, and longer-term OFZs (OFZ-FD). For the short-term part, bondholders received a cash payment of 3.33 percent of the adjusted nominal value, 3.33 percent in three-month GKO, 3.33 percent in six-month GKO, and 20 percent in “cash value” OFZs. The remaining 70 percent was exchanged for newly issued OFZs with maturities set from three to five years, and coupons of 30 percent, 25 percent, 20 percent, 15 percent, and 10 percent each year (Sturzenegger and Zettlemeyer, 2005; IMF, 1999; Central Bank of the Russian Federation, 1999). All cash proceeds coming from the debt exchange had to be deposited in restricted local currency-denominated accounts (“S-accounts”).

The debt exchange discriminated creditors on the basis of their residence. Russian institutional investors, required to hold GKO/OFZs by law, received slightly better terms: 10 percent in cash, 10 percent in three-month GKO, 10 percent in six-month GKO, 20 percent in cash value OFZs, and 50 percent in OFZs with maturities ranging from four to five years (Sturzenegger and Zettlemeyer, 2005; IMF, 1999). Non-

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471 The exchange was implemented following the Russian government’s Resolution No. 1787-r (Central Bank of the Russian Federation, 1999).

472 Residents held RUB 110 billion (U.S. $17.6 billion at the pre-crisis exchange rates, or U.S. $4.81 billion at the March 1999 exchange rate of RUB 22.86 per U.S. dollar), and non-residents RUB 80 billion (U.S. $12.8 billion at pre-crisis exchange rates, or U.S. $3.5 billion at the March 1999 exchange rate). See Sturzenegger and Zettlemeyer (2005) and Santos (2003).

473 Before the exchange, GKO featured original maturities of up to 12 months and OTZs from one to two years (Sturzenegger and Zettlemeyer, 2007). New bonds featured four- and five-year maturities (Central Bank of the Russian Federation, 1999).

474 The GKO were issued on December 15, so they expired shortly after the exchange. OFZ could be used to pay taxes or to purchase newly issued shares of Russian banks (Sturzenegger and Zettlemeyer, 2007).

475 Deposited money could be used to purchase selected Russian corporate bonds or equities (Sturzenegger and Zettlemeyer, 2005; IMF, 1999).

476 The GKO and OFZs the central bank held were restructured into long-term government securities bearing a coupon of 2 percent per year in accordance with Federal Law No. 36-FZ, dated February 22, 1999 (Central Bank of the Russian Federation, 1999).

477 The larger share of cash payments resulted in a slightly improved deal of 2 to 4 percent for investors receiving the shortest OFZ, and of 5 to 7 percent for investors receiving the longest OFZ (depending on the discount rate applied).
residents received smaller cash payments and faced withdrawal restrictions.\footnote{Withdrawals and repatriation of funds at market exchange rates were allowed only after the money had been placed in a non-interest-bearing “transit account” for one year (Sturzenegger and Zettlemeyer, 2007).} Estimated NPV losses ranged from 40 to 55 percent for residents and from 50 to 75 percent for non-residents (Sturzenegger and Zettlemeyer 2005, 2007).\footnote{NPV estimation results for residents do not consider exchange restrictions, whereas results for non-residents take these restrictions into account (Sturzenegger and Zettlemeyer, 2005).}

The participation rate was 95 percent for residents and 88.5 percent for non-residents. Non-residents who did not participate in the debt exchange were fully repaid but had to place their proceeds into “S-accounts” with a five-year repatriation restriction (Sturzenegger and Zettlemeyer, 2005). Given the high interest rate environment, this implied a haircut similar to the one faced by foreign creditors participating in the debt (Sturzenegger and Zettlemeyer, 2007).

During the crisis, the Russian Pension Fund also accumulated a sizable stock of domestic arrears, which amounted to RUB 16 billion (US$ 2.88 billion) in 1996 (IMF, 1999).\footnote{Amounts in U.S. dollar are computed using an exchange rate of RUB5.56 per U.S. dollar.} Arrears were cleared by September 1999, when the federal budget transferred the money needed to the Pension Fund.\footnote{As the stock of arrears increased, the government adopted several clearance schemes known as “offsets,” based on an offsetting mechanism of pre-existing debts. Over time, these operations evolved in different forms, with some involving transactions (for example, the government purchased goods and services in exchange for writing off tax debt). Offsets in 1998 amounted to 2 percent of GDP (IMF, 2000b).}
References


Santos Alejandro (2003). “Debt Crisis in Russia: The Road from Default to Sustainability” in David Owen and David O. Robinson, eds., *Russia Rebounds.* Washington: International Monetary Fund,

Rwanda (1989)

Framing the crisis

The lofty declines in the international coffee prices from early 1987 together with unfavorable climate conditions, adversely affected Rwandan agricultural production. In 1989, real GDP contracted 5.7 percent (World Bank, 1991), and exporting coffee at a loss became increasingly onerous for government finances. From 1987 to 1989, the average annual transfer to coffee producers accounted for 10 percent of total government expenditures. As a result, Rwanda’s fiscal deficit widened hovering around 5 percent of GDP in the second half of the 1980s. Meanwhile, the government increasingly relied on domestic investors and the central bank to finance the fiscal deficit (World Bank, 1991).

Details on domestic debt restructuring

In 1989, the Ministry of Finance forced domestic banks to either roll over Treasury bills or convert them into development bonds (World Bank, 1991). Banks opted for development bonds. The original Treasury bills featured a shorter-than-one-year maturity and no coupon. Development bonds featured a five-year maturity and paid a 7 percent coupon (National Bank of Rwanda, 2020). Given the lack of more accurate information, we consider that the entirety of the RWF950 million (U.S.$12.16 million) in outstanding Treasury bills were involved in the exchange in 1989. A similar operation occurred in 1990; however, due to the lack of information, we cannot report the details of this additional operation (World Bank, 1991).

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482 Starting at the end of the 1970s, the Rwandese government embarked on a large expenditure program to boost coffee production (World Bank, 1991).

483 At the end of the 1980s, total public debt-to-GDP increased by around 18 percentage points, with the domestic market acquiring 40 percent of this increment (World Bank, 1991). Most of the central bank’s credit to the government occurred in the form of exceptional advances (RP2.6 billion in 1987 and RP3.3 billion in 1989).

484 U.S. dollar amounts are computed using an exchange rate of RWF78.156 per U.S. dollar.
References


reports/documentdetail/263661468147299988/rwanda-financial-sector-review.
Rwanda (1994)

Framing the crisis

Years of ethnic conflict and armed confrontations, particularly in the North, culminated in genocide against the Tutsi in 1994. During the genocide period, the economy came to a standstill with real GDP contracting 41.89 percent in 1994 while the deficit peaked at 11.32 percent of GDP. An accurate assessment of the impact of the war on Rwanda's productive capacity is affected by weaknesses in the data available. A lot of the information dating back before the conflict was lost, and many statistical indicators became non-existent (IMF, 2000c).

Amid political chaos an economic uncertainty, the government defaulted on its government bonds, and both external and domestic arrears started accumulating (Cassimon, Essers, and Verbeke, 2016; IMF, 2000c; Moody’s, 2013; Oxfam International 1999; Reinhart and Rogoff, 2011; S&P, 2006).

Details on domestic debt restructuring

Following the end of the civil conflict, Rwanda embarked on an ambitious plan to identify and clear its outstanding domestic arrears. To this end the government undertook several internal audits on public finances and created the Office of the Auditor General (by the Law no 05/98) in June 1998 (Auditor General, 2013).

To clear its accumulated arrears on government bonds, the government adopted a mixed approach dependent on the creditors involved (IMF, 2000c; 2002). First, in 1998, the government started repaying the development bonds commercial banks held. Second, in 1999, the government started repaying the development bonds other creditors held, mostly the Caisse sociale du Rwanda (CSR) (MINECOFIN, 2020; African Financial Market Initiative, 2020). As of end-1998, identified interest arrears amounted to RF10.85 billion and penalty interest accumulated on government papers held by the CSR amounted to RF5 billion (U.S.$50.75 million) (IMF, 2001c). In December 1999, the government and the CSR agreed on the repayment of RWF24.1 billion of development and Treasury bonds. According to the agreement, a partial refund of interest arrears amounting to RWF800 million per year was paid over three years, starting in December 2000 (National Bank of Rwanda, 2005). Parties also committed to signing a new agreement at the end of the three years. From 2004 to 2006, additional claims were validated, which increased the CSR debt by RWF24 billion in 2005 and by RWF19 billion in 2006 (National Bank of Rwanda, 2006, 2007). In 2006, the parties agreed to consolidate

485 An accurate assessment of the impact of the war on Rwanda’s productive capacity is affected by weaknesses in the data available. A lot of the information dating back before the conflict was lost, and many statistical indicators became non-existent (IMF, 2000c).

486 Disruption in the recording system and weaknesses in expenditure control were the main reasons for the accumulation of arrears (IMF, 2001a).

487 As reported by Cassimon, Essers, and Verbeke (2016), a new repayment schedule was negotiated between the banks and the government, but we did not find any additional information on it.


489 U.S. dollar amounts are computed using an exchange rate of RWF312.31 per U.S. dollar.

490 See agreement No. 10/98.
arrears from several government entities to the CSR into a single government bond (Cassinon, Essers, and Verbeke, 2016).\textsuperscript{491}

An internal audit discovered additional RWF27 billion (U.S.$6.27 million) of arrears, that had been accumulated before 2000, the majority of which had been incurred before or during the 1994 war (IMF, 2000a, 2000b, 2001b).\textsuperscript{492} As initial numbers were revised and new claims emerged, the stock of pre-2000 obligations rose to more than RWF40 billion (5.3 percent of GDP). Following the Auditor General’s final review, RWF31 billions of claims were validated (IMF, 2002). For the remaining still-to-be-validated arrears and other claims, the government tasked a committee of senior administrators (the PRGF Committee) to devise acceptable standards (IMF, 2002).

Public finances remained in dire straits, and the country kept accumulating domestic arrears despite the government’s efforts to improve public accounting, reporting, and expenditure control.\textsuperscript{493} In 2008, the Auditor General (2010) reported that several budget entities had not serviced loans acquired from commercial banks.

Additionally, several local districts that acquired loans from Rwanda Development Bank (BRD) to purchase mobile phones experienced difficulties in servicing the loans. As of December 2008, loan arrears of the local districts amounted to RWF57.23 in principal and RWF77.19 in interest. This resulted in the BRD having to pay the loan amount directly to the mobile phone supplier (Auditor General, 2010).

The episode also involved the restructuring of the Rwandan government debt held by the Central Bank (BNR). On February 7, 1996, both parties signed an agreement to consolidate all unpaid loans granted to the government up to end-1994.\textsuperscript{494} Loans initially amounted to RWF34.46 billion (U.S.$113.29 million) but increased to RWF43.44 billion in August 1997 following the incorporation of the balance of the revaluation account of RWF9.01 million and the addition of a 2 percent interest rate per annum.\textsuperscript{495} Interest rates were calculated on a quarterly basis, starting on January 1, 1996. As per the agreement, the government started repaying this debt in 2002, forgoing the 30 percent government share of the BNR profits (National Bank of Rwanda, 2004, 2017).

\textsuperscript{491} As reported by the Auditor General (2010, 2011), RWF25.65 billion of outstanding government arrears related to obligations that had been issued before 1994 were still presented in the consolidated financial statements for 2010, but no information on their repayment schedule was reported.

\textsuperscript{492} U.S. dollar amounts are computed using an exchange rate of RWF430.486 per U.S. dollar. According to the plan, the arrears were set to be paid partly in cash and partly through the issuance of government securities with a market interest rate.

\textsuperscript{493} The Auditor General (2009) also reported several cases of loans and receivables for public entities not recorded in the government accounts.

\textsuperscript{494} The agreement became effective on February 9, 1996 (National Bank of Rwanda, 2017).

\textsuperscript{495} See agreement No 5/96 and article 79 of Law No. 11/97. U.S. dollar amounts are computed using an exchange rate of RWF304.164 per U.S. dollar.
References


Sierra Leone (1989)

Framing the crisis

In the 1980s, Sierra Leone’s GDP contracted almost continuously due to political instability, social unrest, and inadequate policy responses (Bangura, 2014). From 1989, domestic arrears and borrowing from domestic banks became the primary sources to finance the fiscal deficit. By the end of the civil war in July 1999, the government had accumulated substantial payment arrears toward domestic suppliers/contractors, employees, and other claimants (IMF, 2004b, 2005a; Government of Sierra Leone, 2014).

Details on domestic debt restructuring

A first restructuring episode involved the central bank. In 1996 and 2000, the government issued non-negotiable, noninterest-bearing domestic securities with no maturity (about U.S.$185 million using the end-2004 exchange rate), called NNIB, to the central bank to cover its operational losses from the 1990s to the early 2000s (IMF, 2006). In agreement with the central bank, the government gradually started converting the NNIB into active Treasury securities in 2007 (Government of Sierra Leone, 2014). In December 2010, Le177.5 billion (US$ 44.6 million) and Le45.3 billion (US$ 11.3 million) of the stocks of NNIB and Ways and Means Advances (the government’s overdraft facility at the central bank) were converted into Treasury securities. Of the converted stock of NNIB, Le100 billion (U.S.$25.1 million) was in the form of a five-year, 9 percent coupon bond, whereas the residual amount was in the form of Special Treasury bills used for monetary operations (IMF, 2011).

Starting in 2000, the government of Sierra Leone initiated verification exercises to clear domestic arrears. The first verification process was conducted in the second half of 2000 and identified a stock of domestic arrears amounting to Le35 billion (US$ 16.7 million). Out of this amount, only Le13.9 billion (US$ 6.6 million) of arrears were considered valid claims. The government adopted a scheme to buy back arrears at a discount ranging from 30 to 45 percent, which reduced the final amount of arrears to Le6.1 billion (US$ 2.9 million) (IMF, 2001, 2005b; UNDP 2007). In 2001, the government started paying back the stock of domestic arrears identified and verified in 2000. However, arrears continued accruing, mostly in the form of unpaid teachers’ salaries and arrears to domestic suppliers/contractors (IMF, 2002a). In 2002, after the government had cleared arrears due to state-owned enterprises using cross-debt settlements, the total stock of domestic arrears amounted to Le41.98 billion (US$ 20 million) (IMF, 2002b, 2005a).

In the first three quarters of 2003, 'unaccounted items' in the government’s financial accounts increased substantially due to government’s decision to increase salaries for teachers' payroll, health workers, and the

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497 Skilled workers left the public sector due to the war. Official statistics became incomplete and unreliable (IMF, 2004a). As a result, information about arrears and their clearance process is quite limited.
498 Other claims, which created litigations, were related to a single creditor named Wanza Group of Companies, and they dated back to 1992.
499 The arrangement compensated all central government Ministries, Departments, and Agencies’ (MDAs) utility arrears with corporate tax and customs duty arrears owed by the utility companies (this could be streamlined). Through the arrangement, the government and the electricity company cleared their reciprocal arrears.
military, and to raise statutory gratuities and allowances for parliamentarians. This decision resulted in a significant overrun on the wage bill and higher-than-budgeted spending in 2003. In the same year, another verification process identified Le19.3 billion of domestic arrears (US$ 8.2 million), related to wages and public utilities. The government planned to pay small creditors in cash, which amounted to Le1.9 billion (US$ 0.81 million), and to securitize the remaining part (IMF, 2004a).\footnote{In November 2003, the government also cleared all intra-government arrears with the National Power Authority through a settlement of cross liabilities. This resulted in a net debt of Le6.4 billion being paid by the government in cash (IMF, 2004a).} Despite the ongoing arrears clearance efforts, domestic payments arrears owed to private suppliers and utility companies, kept increasing, peaking at Le41.9 billion (US$ 15.5 million) at end-2004 (IMF, 2006).\footnote{Outstanding utility arrears were large and mainly due to SierraTel (the main telecommunication company) for an amount equal to Le33.5 billion at end-2004 (IMF, 2005a).}

Another verification process conducted in 2007 identified Le40 billions of domestic arrears (US$ 13.4 million), which involved claims from 2005 to 2007. (IMF, 2008b).\footnote{Total verified and accepted arrears for 2007 amount to about Le20 billion, against an initial estimate of Le26 billion. Verified and accepted arrears accrued in 2005 and 2006 amounted to Le21 billion (IMF, 2008b, 2009).} Arrears audited in 2007 were cleared in 2008, while those accumulated in 2005 and 2006 were cleared in 2009 and in 2010 (IMF, 2008a).\footnote{Regarding the out-of-court settlement of domestic arrears to the Wanza Group of Companies, the government reached an agreement to defer implementation of the out-of-court settlement pending the mobilization of resources to retire the claims.} At the end of the clearance process, the total outstanding verified domestic arrears amounted to Le14.04 billion (U.S.$3.2 million) in 2011 (Government of Sierra Leone, 2014).\footnote{In 2011, a U.S.$7 million zero coupon bond was amortized in respect of an out-of-court judgement debt owed by the government (Government of Sierra Leone, 2017).} In 2017, another round of verifications identified outstanding domestic arrears amounting to Le13.65 billion (US$ 1.8 million), which included balances brought forward from 2016 amounting to Le10.37 billion (Government of Sierra Leone, 2017; IMF, 2014). Nevertheless, later in 2017, new arrears amounting to Le460 billion (US$ 62.3 million) were accumulated to domestic contractors/signers (IMF, 2017, 2018). The accumulation of arrears continued through 2018 and, at the end of the year, total arrears and future payment obligations peaked at Le10.9 trillion (US$ 1.37 billion). This amount included the following: (i) Le1.5 trillion of crystalized obligations (unpaid checks);\footnote{Unpaid checks amounted to Le317 million in 2016 (IMF, 2016). The government issued unpaid checks, and the recipient had to present them to the central bank (BSL) for payment, but the BSL (under the government’s instructions) had not honoured them since 2016. This was a common practice in Sierra Leone. In previous years, such unpaid checks had always been cleared by the end of the fiscal year.} (ii) Le418.9 billion of unprocessed vouchers for completed works; and (iii) Le9 trillion of outstanding balances on contracts entered into by MDAs for goods, services, and infrastructure projects (IMF, 2018, 2019a, 2019b; Government of Sierra Leone, 2018). In late 2018, the government cleared domestic arrears accumulated from 2017 to the first half of 2018 (IMF, 2018).\footnote{The government negotiated face value reductions on certain categories of claims and promised in return a reduction of payments due to the government (IMF, 2018).}
References


—— (2006). “Sierra Leone: Request for a Three-Year Arrangement under the Poverty Reduction and
https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Sierra-Leone-Request-for-a-

—— (2008). “Sierra Leone: Letter of Intent, Memorandum of Economic and Financial Policies, and
Technical Memorandum of Understanding.” Washington: IMF, December 5,

Reduction and Growth Facility, Financing Assurances Review, and Request for Waivers of
Nonobservance of Performance Criterion, Extension of the Arrangement, and Rephasing of
Disbursements-Staff Report; Staff Supplement and Statement; Press Release on the Executive
Board Discussion; and Statement by the Executive Director for Sierra Leone,” Country Report No.
08/249. Washington: IMF, July, pp. 4, 6,

Arrangement Under the Poverty Reduction and Growth Facility, Financing Assurances Review,
and Requests for Waivers of Nonobservance of Performance Criteria, Augmentation of Access, and
Modification of Performance Criterion: Staff Report; Public Information Notice and Press Release
on the Executive Board Discussion; and Statement by the Executive Director for Sierra Leone,”


—— (2016). “Sierra Leone: Sixth Review Under the Extended Credit Facility Arrangement, Financing
Assurances Review and Request for Waiver for Nonobservance of Performance Criteria-Press


Slovenia (1991)*

Framing the crisis

Starting in the late 1970s, the Socialist Federal Republic of Yugoslavia (SFRY) encouraged foreign currency deposits for domestic retail investors. Foreign currency savings quickly became the predominant form of savings for households (Council of Europe, 2004), as they were guaranteed by the government, paid annual rates of up to 12.5 percent, and were mostly denominated in deutsche marks (Council of Europe, 2004, 2006; Pleskovic and Sachs, 1994; ECHR, 2014). The central bank held the counterpart assets of those deposits in Belgrade (IMF, 2004).

Due to the thinning of foreign reserves, the SFRY progressively restricted withdrawals from foreign currency deposits during the 1980s and 1990s (Council of Europe, 2004).507 With the breakup of the SFRY, the central bank of Yugoslavia finally seized foreign currency deposits held by Slovenian citizens in April 1991. The deposits amounted to around DM1.8 billion (U.S.$1.19 billion) and were mainly held by domestic residents (IMF, 1998b; Pleskovic and Sachs, 1994; World Bank, 1999, 2004).508

Following the secession from the SFRY on June 25, 1991, Slovenian banks were left with insufficient foreign currency assets to cover their foreign currency liabilities.509 In the same year, the Slovenian government stepped in and took over the guarantee for liabilities arising from foreign currency deposits from the central bank of Yugoslavia (Pleskovic and Sachs, 1994; Council of Europe, 2004).510

Details on domestic debt restructuring

On January 27, 1993, the Slovenian Parliament passed a law, that become effective on February 4, 1993, to address outstanding weaknesses in the banking sector, including the problem of foreign currency deposits in Slovenian banks (Official Gazette no. 7/93; Council of Europe, 2006).511 The government nationalized three banks that were on the verge of bankruptcy (Ljubljanska Banka, Kreditna Banka Maribor, and Komercialna Banka Nova Gorica) and launched a rehabilitation plan for these banks. Nonperforming assets were replaced by deutsche mark–denominated government bonds worth roughly DM1.8 billion and that featured a 30-year maturity and an 8 percent coupon payable quarterly (Bank of Slovenia, 1997; Financial Times, 1993; Council of Europe, 2004, 2006). Several options were offered to depositors to dispose of foreign currency deposits (World Bank, 1999; Blejer and Skreb, 1999):

8We thank Andreja Lenarcic for her precious help in reconstructing the story of this episode.


508 Amount in U.S. dollars are computed using an exchange rate of DM1.516 per U.S. dollar.

509 Before independence, state ownership in Slovenian banks was very limited (World Bank, 1999).

510 According to section 19(3) of the Constitutional Law, Slovenia became guarantor of all foreign currency savings deposited with banks on Slovenian territory at that date regardless of the citizenship of the depositor concerned (Official Gazette no. 1/91; Council of Europe, 2006; ECHR, 2014). See Official Gazette no. 7/93 and 45/94 for the implementation of the guarantee.

511 The Parliament rejected the first plan in 1992 because it did not address bank restructuring and privatization (Pleskovic and Sachs, 1994).
• Cash out the deposited money using banks' resources.

• Convert the deposits into 5-year time-deposits payable in 10 semi-annual instalments of no less than DM1,000 each, and with an interest rate equal to the appropriate discount rate for the currency in which the deposit is denominated.

• Transfer the money into a savings deposit with a maturity of 2.5 years.

• Swap the deposits with 10-year government bonds featuring a 5 percent coupon and semi-annual principal and interest repayments.\textsuperscript{512}

• Swap the deposits with tradable bank stocks (World Bank, 1993; ECHR, 2014).

Several depositors opted for the conversion into government bonds, as those bonds could be used to purchase state-owned properties and companies as well as pay taxes and pension contributions (ECHR, 2014). Approximately DM1.5 billion (U.S.$869.06 million) in deposits were converted to government bonds (Bank of Slovenia, 1997; Financial Times, 1993; Council of Europe, 2004, 2006).\textsuperscript{513} The government established the following rules to compute unpaid interest payments of foreign currency deposits. The interest rate was set equal to:

• The original rate for interest accrued before December 31, 1990.

• An annual 6 percent rate from January 1, 1992, to December 31, 1992.\textsuperscript{514}

• An annual 1.79 percent rate from January 1, 1993, to December 31, 2015.

• An interest rate equal to the overnight deposits for households published in the Monthly Bulletin of the Bank of Slovenia from January 1, 2016, onwards (Republic of Slovenia, 2019).\textsuperscript{515}

Through a decree-law approved on October 4, 1995, Slovenia restructured the original 30-year deutsche mark-denominated bonds in tolar-denominated government bonds of shorter and diversified maturities ranging from 3.6 to 14.9 years.\textsuperscript{516} These bonds featured an amortization schedule in biannual installments and an annual coupon rate averaging 5.6 percent (Bank of Slovenia, 1997; ECHR, 2014). The operation did not involve any nominal face value reduction.\textsuperscript{517} One-sixth of these bonds featured optional revaluation-clause coupons, meaning that bondholders could choose between foreign currency and tolar revaluation clauses.\textsuperscript{518} Series I

\textsuperscript{512} If depositors chose this option, an equivalent amount of 30-year government bonds would have been taken out of the total amount of such bonds the banks received (World Bank, 1993).

\textsuperscript{513} Amounts in U.S. dollars are computed using an exchange rate of DM1.726 per U.S. dollar.

\textsuperscript{514} See section 2 of the Old Foreign-Currency Savings Act 1993.

\textsuperscript{515} See article 3 of the Method on Execution of the Judgement of the European Court of Human Rights in Case no. 60642/08 and Official Gazette of the Republic of Slovenia, no. 48/15.

\textsuperscript{516} Slovenia issued the new bonds on November 16, 1995 (see Uradni list RS, št. 59/95 in 30/98 – ZZLPPO and 64/95).

\textsuperscript{517} See Uradni list RS, št. 59/95 in 30/98 – ZZLPPO and 64/95.

\textsuperscript{518} The tolar indexation clause was an annual interest rate calculated by the Statistical Office of Republic of Slovenia and used for preserving the value of financial liabilities and assets in domestic currency. The foreign currency clause was linked to the middle exchange rate of the Bank of Slovenia for the German mark (Bank of Slovenia, 1997).
bonds became marketable in 1996, featuring an 11-year maturity and a real interest rate of 5.7 percent (Bank of Slovenia, 1997).
References


Council of Europe (2004). “Third Section Decision as to the Admissibility of Application nos 44574/98, 45133/98 and 48316/99 by Ivo Kovacic, Marjan Mrkonjic and Dolores Golubovic against Slovenia.” Strasbourg: Council of Europe, April, pp. 2–4, 8, 13, https://hudoc.echr.coe.int/fre#{"itemid":["001-23835"]}.


Uradni list RS, št. 64/95, http://pisrs.si/Pis.web/pregledPredpisa?id=URED1235.


Slovenia (2002)

Framing the crisis

Due to a weak external environment and subdued domestic demand, economic growth in Slovenia slowed to around 3 percent from 2001 to 2002. With government revenues falling, the deficit started widening. In response, the Slovenian government reduced expenditures and restructured part of its debt issued under domestic jurisdiction and held by domestic banks with the objective of lowering interest payments, and borrowing requirements over the medium term (IMF, 2003).

Details on domestic debt restructuring

On November 8, 2002, the government restructured a fraction of the bonds issued in November 1995 on the basis of the Government Decision of the Republic of Slovenia no. 447-01 / 2001-4 of 18.10.2002 (Republic of Slovenia, 2007). Old bonds totaling SIT21.4 billion were redeemed early, while bonds totaling SIT140.1 billion (U.S.$633.33 million) were exchanged for four new instruments. Old RS15 government bonds featuring an interest rate ranging between foreign currency or tolar revaluation clauses plus 5.35 percent, and foreign currency or tolar revaluation clauses plus 6.50 percent were exchanged for new RS44, RS45, RS46, and RS47 bonds. RS44 bonds featured a 10-year maturity and 6.65 percent coupon. RS45 bonds featured a 3-year maturity and an 8.2 percent coupon. RS46 bonds featured a 5-year maturity and a 3 percent coupon. RS47 bonds featured a 10-year maturity and 3.25 percent coupon. Both RS46 and RS47 allowed the possibility to reevaluate their principal according to movements in the tolar indexation clause (Bank of Slovenia, 2003).

519 The restructured bonds were the RS15 series G to T (Bank of Slovenia, 2003). See the decree-law on early fulfilment of obligations from RS151095S, RS151095T, RS151095P, and RS151095R series bonds (Official Gazette of the RS, No. 83 / 02); the decrees on early fulfilment of obligations from bonds of the Republic of Slovenia series RS151095G, RS151095H, and RS151095L (Official Gazette of the Republic of Slovenia, No. 103/02); and decrees on early fulfilment of obligations from bonds of the Republic of Slovenia series RS151095I (Official Gazette of the Republic of Slovenia, No. 11 /03).

520 Amounts in U.S. dollars are computed using an exchange rate of SIT221.07 per U.S. dollar.
References


Republic of Slovenia (2007). Rebalans proračuna Republike Slovenije za leto 2007, June, 
http://www2.gov.si/zak/Pre_akt.nsf/63b9e6330bddeaadc1256616002a0b55/1f5950e66eb0833fc125730700391a26?OpenDocument&ExpandSection=1
Solomon Islands (1996)

Framing the crisis

In the Solomon Islands, growing wages in the public service wage and inadequate budgetary controls eroded fiscal revenues and boosted government expenditures (IMF, 2005). As a result, the deficit-to-GDP ratio increased sizably printing on average at 6.2 percent from 1993 to 1995. The government relied mainly on borrowing from the domestic financial sector, and on external concessional financing to fund the deficit (IMF, 1998a).

Due to the weak fiscal position, the public debt-to-GDP ratio reached 63.9 percent in 1995, and the government defaulted on its domestic debt in 1996 (IMF, 2004; Chand, 2007).

Details on domestic debt restructuring

Upon default, the Treasury bill market collapsed, and the government forced domestic banks to roll over short-dated Treasury bills (IMF, 1998a, 2004, 2005). In April 1999, Treasury bills amounting to SBD 207 million (US$ 40.78 million) were restructured and converted into two-, three-, four-, and five-year local currency-denominated “restructured bonds” (Chuhan and Sturzenegger, 2003; Moody’s, 2008, 2013). Bondholders could choose between fixed rates ranging from 7.5 to 10 percent (depending on the maturity, and floating rates ranging from 1 to 2 percent above the reference rate, which was initially set equal to the prevailing six-month commercial bank deposit rate and later set to the prevailing Treasury bill rate. The repayment schedule was set to start on April 15, 2001, and structured into quarterly tranches (IMF, 2004).

SBD 22 million (US$ 4.33 million) of Treasury bill were never restructured and kept rolling them over at a fixed 6 percent interest rate or lower in line with market conditions.

Scheduled repayments were never made due to a civil conflict that started in mid-1999 (IMF, 2004, 2005). Notwithstanding a court order (from April 8, 2002) requiring the government to repay the debt according to its original terms, the government did not respect the ruling and, in September 2002, unilaterally started paying a 3 percent interest rate in cash on the stock of restructured bonds (IMF, 2004; National Bank of Solomon Islands, 2004).

After the end of the civil war in 2004, the government restructured domestic bonds, which were locally held by three commercial banks and the National Provident Fund (NPF). SBD 11.9 million (US$ 1.58 million) of interest arrears, corresponding to 60 percent of total interest arrears, were written off according to the

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521 The country also had a stock of SBD 18.94 million of domestic arrears in 1995 (IMF, 1998b). By using an exchange rate of SBD 3.476 per U.S. dollar, it corresponds to U.S. $5.45 million. According to the IMF (2005), the Solomon Islands also defaulted on its external debt in the mid-1990s.

522 The National Provident Fund (NPF) held around U.S. $55 million of Treasury bills when the restructuring exercise was undertaken (Central Bank of Solomon Islands, 2000).

523 U.S. dollar amounts are computed using an exchange rate of SBD 5.076 per U.S. dollar.

524 During the first quarter of 2000, these were gradually absorbed into the auction process (Central Bank of Solomon Islands, 2000).
agreement signed with creditors (Chand, 2005; Zama, 2004). The restructuring exercise was implemented in two stages. First, the government agreed with commercial banks and the NPF to restructure bonds on July 15, 2004. The bonds amounted to SBD 207 million (US$ 27.57 million), SBD 55 million of which were held by the NPF (BBC, 2004; National Bank of Solomon Islands, 2004). The newly issued bonds featured a 14-year maturity and a 2.25 percent interest rate. Principal repayment was scheduled in four tranches (Chand, 2005; IMF, 2005; National Bank of Solomon Islands, 2004). Second, the remaining SBD 75 million (US$ 9.99 million) of government debt held by the NPF was restructured in December 2004 (Central Bank of Solomon Islands, 2005; IMF, 2005; Solomon Islands, 2006). This debt was converted into discounted amortizing bonds with a 15-year maturity, an average 2.25 percent interest rate, and a seven-year grace period applied to half the principal (IMF, 2005; Solomon Islands, 2006). The government agreed to pay SBD 8.2 million up front while the NPF agreed to waive surcharge arrears of around SBD 32 million. The restructuring exercise produced an average maturity extension of 10 years, and an interest rate reduction from 9 percent to an average of 2.25 percent (IMF, 2005 and Chand, 2005).

In 2004, the government also settled SBD 32 million (US$ 4.26 million) of trade credit arrears to local businesses, organizations, and individuals (Central Bank of Solomon Islands, 2005).

525 U.S. dollar amounts are computed using an exchange rate of SBD 7.507 per U.S. dollar.
526 Using an exchange rate of SBD 7.51 per U.S. dollar, the amount restructured corresponds to U.S. $27.56 million (IMF, 2007).
527 The restructured bonds were tradable; however, because under the restructuring agreement any trades required the agreement of the entirety of bondholders, they were not traded (IMF, 2005).
528 In February 2006, the government agreed to restructure SBD 183.7 million of debt owed to the central bank (Central Bank of Solomon Islands, 2006; IMF, 2007). Twenty-five percent of interest arrears (amounting to 0.4 percent of GDP) were settled, and the remaining part forgiven (1.3 percent of GDP). Moreover, outstanding advances were converted into long-term bonds paying a 2.25 percent interest rate. As this episode describes an intra-public sector restructuring, we do not report it in the dataset.
529 Domestic trade credit arrears still amounted to SBD 75 million (U.S. $9.85 million) in 2006 (Solomon Islands, 2006).
References


Sri Lanka (1996)

Framing the crisis

A bomb explosion at the Central Bank of Sri Lanka (CBSL), on January 31, 1996, disrupted routine operations, including those of the Public Debt Department. The explosion destroyed a large number of documents and records. Treasury bill auctions scheduled for January 31, and February 7 were suspended, and maturing bonds were extended (Central Bank of Sri Lanka, 1996; Reinhart and Rogoff, 2011; Reuters, 1996).

Details on domestic debt restructuring

Investors were notified of the extension of maturities to February 16, 1996 and were provided with adequate compensation. We consider the RS8.71 billion (US$ 153.58 million) of local-currency denominated Treasury bills issued in the auction of February 16 as the amount of debt involved in the default episode (Moody’s, 2013; Chuhan and Sturzenegger, 2003).

Payment delays were of a technical nature. All due payments were paid in full as soon as the data and the records were recovered (Fitch Ratings, 2013). There are no records of investor disputes regarding the arrangements described above.

530 The CBSL organized weekly auctions of Treasury bills, on behalf of the government, for debt management purposes. Treasury bills had maturities of 3, 6, and 122 months (IMF, 1998).

531 The last auction before the suspension occurred on January 26.

532 Information regarding the precise amount of Treasury bills coming due in that period remains elusive. Amounts in U.S. dollars are computed using an exchange rate of 56.71 LCU per U.S. $ in 1996 (IMF, 1998).

Centro de Investigación en Finanzas Universidad Torcuato Di Tella, Documento de Trabajo 11, July, p. 33,


Saint Kitts and Nevis (2011)

Framing the crisis

A series of adverse shocks hit the economy in the 2000s. First, the St. Kitts Sugar Manufacturing Corporation closed in 2005 following years of negative profits due to hurricane damages, high production costs, and falling sugar prices.\textsuperscript{533} Subsequently, tourism declined due to the global financial crisis (the main GDP component). Finally, in 2008, Hurricane Omar hit the island causing extensive damages. As a result of the multiple shocks GDP declined 5 percent in 2009 and 2.7 percent in 2010. As the government tried to revive the economy with fiscal stimulus, deficits began widening, soaring from 3.8 percent of GDP in 2009 to 9.4 percent in 2010. Debt-to-GDP ratios also increased sizably, reaching 164 percent in 2010. To add fuel to the fire, the vast majority of the debt had a short maturity and was held predominantly by domestic investors.\textsuperscript{534} In June 2011, with almost 30 percent of its revenues used to service debt (IMF, 2013b), the government announced its intention to restructure debt comprehensively, and started negotiations with creditors. In November 2011, servicing of external commercial debt was suspended, and in February 2012 a restructuring program was launched (Moody’s, 2017).

Authorities restructured the country’s debt in four phases, targeting different classes of creditors in each phase:

1) External commercial creditors and bondholders received a debt exchange offer in February 2012.
2) Debt held by domestic banks was restructured starting in April 2012 (IMF, 2013b).
3) Paris Club creditors agreed on a restructuring of foreign-law debt in May 2012.\textsuperscript{535}
4) agreements with non-Paris Club official bilateral creditors were signed afterwards (IMF, 2013b).

Details on domestic debt restructuring

Domestic-law debt was either unsecured or collateralized with public lands.\textsuperscript{536} During Phase One, unsecured debt was restructured with a debt exchange, which involved bonds and syndicated loans (IMF, 2012c; Moody’s, 2013). The government launched the exchange offer on February 27, 2012. The offer was accepted on March 14 and executed on April 18, 2012. The restructuring covered a total of EC$369 million (US$ 135 million) of local-law debt, held predominantly by foreign commercial creditors. Nevertheless, domestic holders, such as the Social Security Board, also held some debt (IMF, 2012c; Moody’s, 2014).\textsuperscript{537} As of 2011, most of

\textsuperscript{533} The closure of the sugar industry led to an increase of government debt-to-GDP of 29 percent (IMF, 2013b).
\textsuperscript{534} In 2010, commercial bank loans constituted 48 percent outstanding domestic debt (IMF, 2013b, 2012a). In September 2011, 67.3 percent of domestic debt was contracted from commercial banks.
\textsuperscript{535} On May 24, 2012, the government signed a U.S. $5.7 million restructuring agreement with the Paris Club, featuring a 7-year grace period, a 20-year repayment period at a concessional rate, and a consolidation of 93 percent of accumulated arrears (Government of St. Kitts and Nevis, 2012a; IMF, 2012b).
\textsuperscript{536} Intra-public sector government debt, including to social security, was also restructured (Government of Saint Kitts and Nevis, 2012b).
\textsuperscript{537} The Social Security Board is a compulsory insurance fund established by an Act of Parliament in 1977.
the debt held domestically was denominated in local currency, and most debt held externally was denominated in U.S. dollars (IMF, 2011).

Creditors had two options. First, an EC$-denominated par bond with a 45-year maturity, a 15-year grace period on principal payments, and a 1.5 percent coupon. Second, a U.S. dollar-denominated discount bond that featured a 50 percent face value reduction, a 20-year maturity, and a step-down coupon (IMF, 2012c).538 The bonds held by the Social Security Board were exchanged for the EC$-denominated par bond.539 Investors holding 97 percent of the eligible assets agreed to the terms of the restructuring in the first stage. With the activation of the collective action clauses, the participation rate reached 100 percent. Around one-third of creditors opted for the par bond (IMF, 2012c; Moody’s, 2017; Reuters, 2012). Innovative aspects of the exchange concerned the Caribbean Development Bank’s (CDB) guarantee on the U.S. dollar-denominated bond and a “clawback” provision, which envisaged a debt reduction conditional on the completion of the sixth review under the IMF program.540 These features increased confidence in the exchange and encouraged greater participation among creditors (IMF, 2015). The exchange resulted in an average NPV loss of 65 percent (IMF, 2015). Estimated loss ranges from 61 percent for the U.S. dollar-denominated bond to 73 percent for the EC$-denominated bond (IMF, 2012c).541

On June 22, 2013, the government defaulted on an EC$ 20 million (US$ 7.41 million) Treasury bill, which had been explicitly excluded from the bond exchange of April 2012 (IMF, 2013b; Government of Saint Kitts and Nevis, 2012c). Treasury bills had been issued by The Nevis Island Administration (NIA) on the Regional Government Securities Market (RGSM)542, and were held by domestic investors (IMF, 2012a, 2012c).543 The default was unexpected, as the government had committed to exclude Treasury bills and multilateral debt from the restructuring (IMF, 2012a). Debt issued by the NIA accounted for 24 percent of the total stock of Treasury bills and was denominated in local currency, featuring a one-year maturity and a 6.75 percent coupon (Government of St. Kitts and Nevis, 2012a).544 At the end of July 2013, the default was resolved with the

538 The coupon rate was set to 6 percent for the first four years and to 3 percent thereafter.
539 The Social Security Board held two old bonds: (1) an EC$28.69 million 10-year bond issued in November 2002, and maturing in November 2012, traded on the Eastern Caribbean Regional Government Securities Market, with a 7.5 percent interest rate; and (2) a 12-year amortizing bond of EC$15 million face value (EC$12.85 million before restructuring) and an 8.5 percent interest rate, issued in March 2008 and maturing in March 2020 (Social Security Board, 2013).
540 The CDB offered a guarantee on principal and interest due, subject to an aggregate limit of US$12 million, on a rolling, reinstatable, and non-acceleratable basis. According to the clawback provision, creditors had the right to receive additional par bonds (equal to 40 percent of the face amount of discount bonds issued in the exchange offer) if authorities failed to complete the sixth review by March 31, 2014 (IMF, 2012c).
541 Face value reductions are estimated assuming an 8 percent discount rate (IMF, 2012c).
542 The NIA is the local government for the Island of Nevis, which is part of the federal constitutional monarchy of Saint Kitts and Nevis. The RGSM is the regional market for trading debt instruments (Treasury bills and bonds) of the member states of the Eastern Caribbean Currency Union (ECCU). The market was established in November 2002.
543 U.S. dollar amounts are computed using a fixed exchange rate of LCU2.7 per U.S. dollar (IMF, 2014c).
544 Information on the stock of debt and on the defaulted Treasury bills is taken from the websites of the RGSM and of the Eastern Caribbean Securities Exchange.
exchange of the existing Treasury bill with a new one, which featured a 0.5 percent higher interest rate (IMF, 2014c). In

Phase two concerned the resolution of secured debt, which was denominated in local currency, held by local banks, and occurred through a lengthy debt-for-land swap (IMF, 2011, 2012a; Moody’s, 2017). Public lands were transformed into land-management companies (Special Purpose Vehicles, or SPVs), which were established with the aim of selling them and using the revenues to settle the creditors’ claims (IMF, 2012c). Debt was to be cancelled incrementally as the SPV sold the lands. Two SPVs were introduced on April 5, 2012, and, on April 18, domestic banks, the government, and the NIA signed the shareholders’ agreements (IMF, 2012b). Two restructuring agreements, which amounted to EC$900 million (US$ 333 million), were executed in 2012 (IMF, 2012b, 2013b). On June 19, 2013, the government signed a supplementary shareholders’ agreement with the Saint Kitts-Nevis-Anguilla National Bank, which envisaged creating another SPV (the Special Land Sales Company, or SLSC). As a result, debt amounting to EC$565 million (US$ 209.26 million) was cancelled on July 1, 2013 (IMF, 2013a, 2014a, 2014b; SLSC, 2014). Additional swaps for a total of EC$230.95 million (US$ 85.54 million or around 10 percent of GDP) were executed in August and October 2014, and in 2015 (IMF, 2014b; St. Kitts-Nevis-Anguilla National Bank Limited, 2018; Social Security Board, 2015). To mitigate the effect of the land-debt swap on banks’ cash flow and preserve financial stability, creditor banks were offered a fixed 3.5 percent dividend until mid-2016 based on the value of land in the SPV (Government of Saint Kitts and Nevis, 2013; IMF, 2015, 2014c, 2017). While the face value of the debt involved in the operation was not reduced in the restructuring, the government still enjoyed a significant debt relief, as the original debt carried a high interest rate of 8.6 percent (IMF, 2015).

Additional intra-public sector debt was restructured from 2013 to 2014 through ad-hoc agreements between the Social Security Board, the government, and its Statutory Corporations (Social Security Board, 2014). On April 12, 2013, four loans granted by the Social Security Board to the NIA and the Nevis Land and Housing Development Corporation (NHLDC) amounting to EC$26.9 million (US$ 9.97 million), including accrued interest, were restructured, with a face value reduction of EC$9.3 million (Social Security Board, 2013, 2015). On August 15, 2014, the Social Security Board and the Development Bank of St Kitts and Nevis

545 Most debt holders accepted the exchange offer (IMF, 2014c).

546 Most secured debt came from St. Kitts Sugar Manufacturing Company (IMF, 2013b).

547 Revenues from land sales were transferred to creditors in the form of dividends (Government of Saint Kitts and Nevis, 2013). According to the agreement, any residual lands after the settlement of all claims would be transferred back to the authorities. Citizen received priority to purchase land (Government of Saint Kitts and Nevis, 2013).

548 Swapped debt corresponded to commercial bank loans and overdrafts (Government of St. Kitts and Nevis, 2012a). From the EC$900 million, EC$700 million was federal government debt, and the rest was Nevis Island Administration debt (St. Kitts & Nevis Observer, 2015).

549 The new SPV (SLSC) managed the sale of lands, which was executed through the St Kitts-Nevis Anguilla National Bank Limited Act No. 29/2012 (SLSC, 2014). Guidelines for the SLSC were approved on March 10, 2014 (SLSC, 2014).

550 This exchange constituted the bulk of the debt-for-land swap (IMF, 2014c).

551 A key IMF condition was the establishment of a stabilization fund to increase confidence and, if needed, to provide temporary liquidity to solvent local banks. The fund could cover 15 percent of private deposits (IMF, 2013b).

552 The Statutory Corporations refer to state-owned enterprises in St. Kitts and Nevis.
restructured eight loans totaling EC$45.9 million (US$ 17 million), including accrued interest.\footnote{The Development Bank of St. Kitts and Nevis is a state-owned bank, which supports the economic development of the country.} On November 11, 2014, the Social Security Board and the National Housing Corporation (NHC) agreed to restructure five loans amounting to EC$133.6 million (US$ 49.48 million), including total accrued interest. In total, the 2014 restructuring agreements reduced the face value of debt by EC$40.5 million (Social Security Board, 2015).\footnote{Two additional agreements were signed in 2013, but we hardly found information on the agreements. In April 2013, the government restructured the remaining balance of a Public Corporation’s debt, which produced an EC$0.6 million reduction in the debt stock and an EC$0.1 million reduction in interest payments from April 2013 to December 2017. In August 2013, the government refinanced its loans, and that of a Public Corporation with a domestic creditor by consolidating three loans with more favorable terms, which featured extended maturities and lower interest rates (Government of Saint Kitts and Nevis, 2014).}

Finally, in 2016, an overdraft on credit accounts held by the NIA, amounting to US$ 44.98 million (about 5 percent of GDP), was restructured into a long-term loan with a lower interest rate (IMF, 2016, 2017).
References


Sudan (2007)

Framing the crisis

In February 2003, an armed civil conflict erupted in the Darfur region (the so-called Land Cruiser War) between the government, and the rebel groups of the Sudan People’s Liberation Movement (SPLM) and the Justice and Equality Movement (JEM). A Comprehensive Peace Agreement (CPA) was signed on January 9, 2005, and a new government was formed in September 2005 (IMF, 2005; United Nations, 2005). Challenges in the implementation of the peace agreement affected fiscal performance. Following three years of surpluses, the fiscal balance turned negative in 2005 due to unanticipated security expenditures, and a large subsidy on domestic fuels (IMF, 2005).555

The fiscal position improved in the following years due to higher oil revenues, but delays in implementing public spending controls, and in establishing a centralized domestic debt unit resulted in the accumulation of domestic arrears, and finally in a default on domestic debt in 2007 (IMF, 2008).556

Details on domestic debt restructuring

Due to a lack of accurate records, Sudan conducted a major debt reconciliation exercise in April 2007 (World Bank, 2010).557 The reconciliation exercise identified an accumulated stock of domestic arrears amounting to SDG2.6 billion (US$ 1.27 billion), about 2.2 percent of 2008 GDP, of which SDG0.68 billion (US$ 331.22 million) referred to unpaid principal payments on debt obligations.558 These obligations, called Subsidiary Notes, were issued by the Ministry of Finance and National Economy to private companies to clear arrears arising from services rendered to development projects.559 The default on these notes, which occurred from June to December 2007, caused liquidity problems to the bondholders, and reduced investor confidence in the market for government instruments. In 2008, Sudan established a domestic debt unit, which resumed repayments on outstanding liabilities, thus resolving the default (Abbas, Moriyama, and Naseer, 2010; World Bank, 2010).

555 The fuel subsidy, amounting to 3.5 percent of GDP, emerged as domestic fuel prices did not increase in line with the rising international prices (IMF, 2006).

556 Since its independence in 1956, Sudan faced several military conflicts, which severely debilitated its development capacity and posed governance challenges. In the 1960s, the country undertook a large-scale industrialization plan, funded mostly by foreign borrowing at market rates. Due to the resulting heavy debt burden, Sudan accumulated external arrears to several development agencies. As a result, Sudan compromised its access to concessional financing, and started accumulating domestic arrears from 1986 (IMF, 2013; World Bank, 2010). Arrears were still identified by the debt reconciliation exercise of 2007: SDG0.91 billion (U.S. $443.25 million) of overdue cash payments to suppliers of goods and services; SDG 0.47 billion (U.S. $228.93 million) of wage, social security, and pension-related liabilities; and SDG0.55 billion (U.S. $267.9 million) of dues owed to development project contractors and subnational governments (IMF, 2008).

557 Until the end of 2007, the government used a cash-based expenditure reporting system, which considered a liability to be “in arrears” only at the end of the fiscal year. As a result, arrears accumulated during the year were not tracked and not addressed until the following year (IMF, 2008).

558 U.S. dollar amounts are computed using an exchange rate of SDG2.053 per U.S. dollar.

559 These instruments featured varying terms, but we have not found specific information describing them (World Bank, 2010).
References


In the 1990s, the economic cycle of Suriname was closely linked to the international price of aluminum, its main export commodity. As the price of aluminum rose from 1995 to 1997, so did economic growth. However, when the aluminum price declined in 1998, exports tumbled (International Business Publications, 2012). Two additional shocks hit the economy in 1998: the worldwide economic slowdown and the El Nino phenomenon (Van Dijck and others, 2000). As a result, profits from aluminum exports turned negative (International Business Publications, 2012), and fiscal revenues declined sharply (aluminum-related tax receipts accounted for 30 percent of government revenues in the 1990s). As revenues fell, public expenditures surged. Expenses on public wages increased by 79 percent, and expenses on goods and services increased by 68 percent. The deficit-to-GDP ratio reached 6.84 percent in 1998 (Van Dijck and others, 2000) and the fiscal deficit was mainly financed with domestic and external payment arrears.

Details on domestic debt restructuring

Due to the deterioration of macroeconomic conditions, the government decided to reduce expenditures on goods and services sharply. Part of this reduction was implemented by postponing payments unilaterally or through specific agreements with suppliers. For example, for the construction of a bridge, government suppliers agreed to convert the payment into a loan (Van Dijck and others, 2000). Domestic and external payment arrears increased from US$ 20 million in 1998 to around US$ 65 million at the end of 1999, which included US$ 28 million in domestic payment arrears (Van Dijck and others, 2000). Suriname started to pay back unpaid domestic claims in 2001 (IMF, 2002).
References


**Suriname (2009)**

**Framing the crisis**

In 2009, output contracted due to low aluminum prices, a dip in production, and a decline of oil prices. Growth expectations were revised down to 2.5 percent for 2009 against the estimated 6 percent in 2008. Lower aluminum and oil prices severely strained government revenues. Meanwhile, government expenditure rose owing to increasing wages for civil servants (due to the introduction of the two-step wage reform program known as FISO-1), larger pension payments, a new mortgage subsidy scheme, and some capital projects commencing. As a result, the fiscal deficit-to-GDP ratio reached 2.09 in 2009, and public debt rose from 18 percent of GDP in 2008 to 21.6 percent in 2010 (IMF, 2009). Between the end of 2009 and early 2010, the government started accumulating domestic arrears (IMF, 2011).

**Details on domestic debt restructuring**

The amount of domestic arrears involved in the episode was estimated at SRD 100 million at the end of 2010 (US$ 36.36 million).561 The government started paying back arrears in 2010 (IMF, 2012). While short-term domestic arrears were cleared thanks to the strong fiscal performance of 2011 (IMF, 2012), the clearing process of long-term arrears is still ongoing as reported in the last available IMF report (IMF, 2018).

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561 U.S. dollar amounts are computed using an exchange rate of SRD 2.75 per U.S. dollar in 2010 (IMF, 2012).
References


Turkey (1999)

Framing the crisis

The Turkish economy had suffered from high inflation and weak public finances from the 1970s (IMF, 1998). In 1998 and 1999 the Asian financial crisis and two earthquakes exacerbated the situation. The lira depreciated substantially, foreign capital fled the country, and inflation edged up. Real GDP contracted 3.4 percent in 1999. On November 26, Turkey introduced the “earthquake law” to deal with the economic fallout of the earthquakes. According to the law, all outstanding local-currency securities the government issued before December 1, 1999, were subject to a retroactive one-off withholding tax on interest income, which de facto reduced the nominal interest promised to creditors (Reuters, 1999d; Moody’s, 2008, 2017; IMF, 1998; Turkish Daily News, 1999).

Details on domestic debt restructuring

The withholding tax was applied retroactively starting on November 1, 1996, and affected US$ 48.28 billion of local-currency debt (Jeanneret, Paget-Blanc, and Souissi, 2014; Reuters, 1999b). Tax rates were structured as follows:

i) Discounted bills and bonds were taxed according to their maturity: 4 percent for assets with a maturity between 1 and 91 days, 9 percent for assets with a maturity between 92 and 183 days, and 14 percent for assets with a maturity more than 183 days.

ii) Floating-rate notes were taxed 4 percent.

iii) Fixed-rate bonds were taxed 19 percent (Moody’s, 2017).

Tax exemptions were granted for bonds issued via private placements, bonds denominated in a foreign currency, and local-currency bonds issued after December 1, 1999. As of 1999, foreign investors held less than 10 percent of debt issued under domestic law, and domestic banks held 70 percent of total outstanding domestic debt (Moody’s, 2017; Reuters, 1999b). Foreign and domestic bondholders received the same conditions.

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562 Since 1994, the government had relied mostly on domestic financing to cover its deficit.

563 The two earthquakes, on August 17 and November 12, 1999, cost public finances around U.S. $6.2 billion (Reuters, 1999a).

564 The measures aimed to improve tax revenues in the 2000 budget to meet the extensive costs related to earthquakes (Reuters, 1999c).

565 Previous tax rates were zero (IMF, 1998).
References


Framing the crisis

Despite government’s effort to modernize fiscal management and drive down the shadow economy, fiscal deficits remained large through the 1990s. Initially, the government monetized these deficits, which resulted in considerable inflationary pressures. Starting in 1996, the government started funding its deficit by issuing debt, in an effort to stabilize prices. Debt was issued mostly in the form of T-bills to domestic and foreign borrowers (U.S. Government Printing Office, 2002). These issuances sparked the interest of foreign investors in domestic bonds. Additionally, the country was able to tap international financial markets on several occasions (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008).

At the start of 1998, Ukraine seemed to be on the path of recovery from the dramatic economic decline that characterized the post-Soviet era. In the second half of the year, however, dwindling investor confidence in emerging market economies adversely affected the country. Real GDP contracted 1.7 percent and a sudden capital flight produced financing shortfalls. In response, the government undertook a sizable fiscal adjustment in the second half of 1998. Even though the deficit-to-GDP ratio decreased from 5.6 percent in 1997 to 2.7 percent in 1998, the budgetary situation remained problematic (IMF, 1999c). Ukraine started facing difficulties rolling over its debt, which was quickly reflected in a rapid accumulation of new debt at increasingly high rates (IMF, 1998, 2006). Finally, notwithstanding the relatively low debt-to-GDP ratio (41.8 percent in 1998), the government had to restructure its domestic law debt through selective interventions in 1998 and 1999 before launching a restructuring of its entire stock of outstanding external law bonds in early 2000 (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008).

Details on domestic debt restructuring

In August 1998, Ukraine started negotiating separate debt exchanges with resident (commercial banks) and nonresident holders of zero-coupon local currency Treasury bills issued under domestic law in 1997 and 1998 (OVDPs).

The exchange with resident creditors (commercial banks) occurred on August 26, 1998, and it offered exchanging outstanding T-bills into longer-term local currency-denominated bonds featuring a 3 to 6-year maturity, a 40 percent coupon for the first year, and a floating rate equal to the future yield on the 6-month T-bill plus 1 percentage point until maturity (Financial Times, 1998; Reuters, 1998a). Eligible debt amounted to HrV10.05 billion (U.S.$4.47 billion), of which commercial banks held HrV2.4 billion (U.S.$1.07 billion), and the National Bank of Ukraine held HrV7.6 billion (U.S.$3.4 billion) (Moody’s, 2013). The amount exchanged

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566 In 1997, the T-bill market became the major source of financing for the budget 2000 (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008).


568 Government debt amounted to 14 percent of bank’s total assets (Roubini and Setser). These amounts are computed using an exchange rate of LCU2.25 per U.S. dollar in August (Sturzenegger and Zettlemeyer, 2005).
was Hrv8.4 billion (U.S.$3.75 billion), including all the debt the National Bank of Ukraine held, and Hrv803 million (U.S.$356.88 million) domestic banks held (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008; Sturzenegger and Zettlemeyer, 2005; IMF, 1999a; 2002; 2005). The overall participation rate was 83.6 percent (IMF, 2012; Sturzenegger and Zettlemeyer, 2005).

Different exchange coefficients were applied to reflect the present value of the T-bills at the time of the exchange. T-bills that had matured prior to the exchange received no face value reduction, whereas T-bills that were set to mature in July or August of 1999, received a 34.43 percent face value reduction (Sturzenegger and Zettlemeyer, 2005; Moody’s, 2014). Estimates of the NPV losses range from 5 to 18 percent (Moody’s, 2013; Sturzenegger and Zettlemeyer, 2005). NPV losses were modest, as the interest rate reductions were only applied to the first year. To avoid a harsh default, the government of Ukraine tried to resolve the liquidity crisis extending the maturities and promised to resume paying interests in line with market rates after the first year. Thanks to the use of different exchange coefficients, creditors’ losses very similar across all outstanding Treasury bills (Sturzenegger and Zettlemeyer, 2005).

The exchange with nonresident creditors, which was based on different exchange terms, occurred on September 22, 1998, and involved Hrv1070 million (U.S.$346.28 million). Initially, bondholders were offered the option to receive a two-year local currency-denominated bond featuring a 22 percent hedged annual yield in exchange for their holdings (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008; Sturzenegger and Zettlemeyer, 2005; Moody’s, 2014; Reuters, 1998b, 1998c, 1998e). However, creditors largely ignored this offer because they were worried about the potential introduction of capital controls, which were under discussion at the time (International Financing Review No. 1251). Subsequently, investors were offered the option to exchange their original holdings for a two-year zero-coupon dollar-denominated Eurobond (issued through Merrill Lynch) featuring a 20 percent yield. Some of the original bonds (9- and 12-month T-bills issued in December 1997 through Merrill Lynch), which featured guaranteed minimum dollar returns (currency hedges), received an additional 20 percent of the present value of their principal paid in cash and in U.S. dollar. This second offer was well received by investors and the final participation rate was 82 percent (Dow Jones, 1998; Reuters, 1998d; IMF, 2006; Sturzenegger and Zettlemeyer, 2005). As estimated by Sturzenegger and Zettlemeyer (2005), NPV losses ranged from 38 to 57 percent, significantly larger than those domestic creditors suffered.

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569 In April 1999, Hrv8.6 billion (U.S.$2.18 billion) of T-bills the National Bank of Ukraine held were again restructured on terms comparable to those that had been previously agreed with commercial banks (Reuters, 1999).
570 Already matured debt suffered an 8.5 percent NPV loss, whereas just issued debt faced a 5 percent loss (Sturzenegger and Zettlemeyer, 2005).
571 Amount computed using the September exchange rate of LCU3.09 per U.S. dollar (Sturzenegger and Zettlemeyer, 2005, table 14 and p. 21).
572 The introduction of capital controls would have resulted in a large decrease of domestic T-bill yields (Sturzenegger and Zettlemeyer, 2005).
573 According to the hedge agreement, investors were supposed to receive a minimum 22 percent dollar return. The cash amount is computed by using the September 22, 1998, exchange rate of LCU2.94 per U.S. dollar (Sturzenegger and Zettlemeyer, 2005).
574 The government created special blocked accounts denominated in local currency for nonresident holders who chose not to participate in the exchange (IMF, 1999d).
Nonhedged instruments suffered a 40 percent NPV loss, whereas hedged debt suffered around a 55 percent NPV loss (Sturzenegger and Zettlemeyer, 2005).

In addition to the T-bills exchange, Ukraine restructured two U.S. dollar-denominated loans, which were part of its external debt in 1998. A U.S.$109 million loan received by Chase Manhattan was restructured in October 1998 (Moody’s, 2014). According to the agreement, 25 percent was paid in cash, while the remainder was restructured into a new amortizing loan with a dollar interest rate of 16.75 percent. NPV losses were estimated at 30 percent (Sturzenegger and Zettlemeyer, 2005). The second restructuring occurred on July 15, 1998, when Ukraine restructured a 10-month U.S. dollar-denominated loan from ING BARINGS, which involved U.S.$163 million payments (including interest) due on June 9, 1998. According to the agreement, Ukraine paid 20 percent in cash and swapped the remainder for DM-denominated bonds with a maturity in February 2001 and a 16 percent coupon, at a rate of 94.3 cents of new debt for each dollar of old debt (Moody’s, 2014). This operation implied an NPV loss of about 38 percent. Holders of the restructured U.S.$500 million in zero-coupon Eurobonds issued through Merrill Lynch in September 1998 were also offered to join the exchange. Their holdings were valued at either 55 cents or 75 cents to the dollar if investors agreed to increase their holdings by at least 15 percent. Fifty percent of eligible bondholders accepted the offer, implying a 34 percent NPV loss (IMF, 1991; Sturzenegger and Zettlemeyer, 2005).


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575 The ING bond was mostly held by one investor (Regent Pacific Group) that insisted on full repayment and rejected Ukraine’s first offer presented on May 18, 1999 (Sturzenegger and Zettlemeyer, 2005).


577 Retail investors held 50 to 60 percent of the Eurobonds (Moody’s, 2017).

578 The three bonds issued under Luxembourg law carried collective action clauses with an 85 percent threshold, whereas the bond governed by German law did not (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008).

579 Both bonds featured a one-year grace period (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008).
participation rate reached 99 percent (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008; IMF, 2005; Moody’s, 2013; Chuhan and Sturzenegger, 2003).\textsuperscript{580}

\textsuperscript{580} Holders of instruments without CACs were offered to tender their old bonds for the new instruments in a single step. Holders of instruments with CACs willing to accept the exchange offer were instead asked first to give a proxy vote for the proposed amendments on old bonds. Once they received enough favorable proxy votes, Ukraine authorities called bondholder meetings with the certainty that the amendments would be accepted (Diaz-Cassou, Erce-Dominguez, and Vazquez-Zamora, 2008; IMF, 2005).
References


Uruguay (2002)

Framing the crisis

In January 1999, Brazil’s decision to float its currency reduce the demand for regional imports. Uruguayan policymakers perceived this shock as temporary, and implemented countercyclical policies, which were mostly financed with government debt. In particular, the government accumulated a high cushion of foreign reserves and increased government spending, assuming that it would maintain market access, which was fundamental to roll over its short-term debt (Steneri, 2003).

The disorderly sovereign default in Argentina in 2001 spilled over into the region. In December 2001, Argentines started withdrawing deposits from Uruguayan banks, mostly from Banco de Galicia Uruguay and Banco Comercial triggering a bank run (Halac and Schmukler, 2003; Steneri, 2003). The anxiety rapidly spread to other domestic banks (IMF, 2003b; World Bank, 2005), and subsequently the central bank injected liquidity into the system but to no avail. Total bank deposits of the non-financial private sector fell 50 percent over the course of 2002 (World Bank, 2005). At the same time, the Uruguayan peso came under pressure due to the capital outflows generated by deposit withdrawals and a loss of confidence in the Uruguayan economy. On June 19, 2002, Uruguay abandoned the peg to the U.S. dollar (Sturzenegger and Zettlemeyer, 2005). In a couple of weeks, the peso depreciated about 50 percent, causing a large increase in the public debt-to-GDP ratio, and undermining the government’s ability to rescue distressed banks (Diaz-Cassou and others, 2008; Roaf, 2007). As a result, the government liquidated four insolvent large private banks and unilaterally revised the terms of public bank deposits, which were denominated in foreign currency (Diaz-Cassou and others, 2008; Steneri, 2003).

The combined banking and currency crisis had a dramatic effect on the debt-to-GDP ratio, which more than tripled from 1999 to 2003. By early 2003, the debt ratio had reached 95 percent, with large refinancing needs jeopardizing the ability to honor debt obligations (Moody’s, 2017; Diaz-Cassou and others, 2008; IMF, 2003a). On March 11, 2003, the government announced a sovereign debt restructuring largely perceived as market friendly, voluntary, and cooperative (Diaz-Cassou and others, 2008).

Details on domestic debt restructuring

On August 4, 2002, the Uruguayan Congress approved Law No. 17,523, aiming to safeguard the country’s payment and financial system. Among other measures, the law introduced a fund for the stability of the Uruguayan banking system (the Fondo de Estabilidad del Sistema Bancario, or FESB), and forcibly extended the maturities of all U.S. dollar-denominated time deposits of the state banks Banco de la República and Banco Hipotecario to three years (República Oriental del Uruguay, 2003; Halac and Schmukler, 2003). The

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581 Argentines held about half of the bank deposits in Uruguay. The deposit freeze enacted in Argentina triggered withdrawals.

582 The central bank did not provide liquidity assistance to Banco de Galicia Uruguay, which was the first bank hit by a run, mainly from Argentine depositors (Halac and Schmukler, 2003). The closure of this bank sparked contagion (Jacome, 2008).

583 Uruguay received an IMF loan, under the stand-by facility, amounting to U.S. $2.76 billion (República Oriental del Uruguay 2003).

584 At the time, the government fully guaranteed state bank operations (IMF, 2003b)
total amount of deposits affected by the reprogramming amounted to US$ 2.22 billion, mostly held by residents (IMF, 2003b; República Oriental del Uruguay, 2003). According to the new terms, time deposits featured a 25 percent principal repayment from August 2003 to July 2004, another 35 percent from August 2004 to July 2005, and the remaining 40 percent from August 2005 to July 2006 (IMF, 2004). The government also reduced the interest rates from 6 to 3.5 percent (IMF, 2004).

Government bonds were also restructured. Toward the end of 2002, the government approached bondholders to explain that the country was facing a liquidity problem due to adverse regional conditions. Creditors expressed their preference for a maturity extension as opposed to a principal or coupon reduction. As Uruguay’s debt featured low fixed coupons and short-term maturities making the maturity extension option easily implementable also for governments (Steneri, 2003).

The final debt exchange offer was presented on April 10, 2003, and the exchange was implemented on May 29, 2003. The deadline for offers was later extended by one week to boost participation (Moody’s, 2014; IMF, 2003a). The overall debt exchange amounted to US$ 5 billion of the US$ 5.4 billion of eligible debt (Moody’s, 2013; IMF, 2003a). The restructuring excluded local currency-denominated instruments, tradable securities with an initial maturity of less than a year, and non-tradable debt held with other private and public creditors (Diaz-Cassou et al., 2008; Moody’s, 2013; IMF, 2003b). Residents held approximately two-thirds of all eligible bonds. (World Bank, 2005; IMF, 2003a).

The exchange targeted all traded debt, which corresponded to about half of the total sovereign debt (Sturzenegger and Zettlemeyer, 2005). Eligible securities were composed of 46 domestically issued bonds and Treasury bills, both denominated in U.S. dollars, amounting to US$ 1.62 billion; 18 international bonds issued under foreign law (in Europe and the United States) amounting to US$ 3.5 billion; and 1 Samurai bond, issued in Japan, and amounting to about US$ 250 million (Moody’s, 2013; Sturzenegger and Zettlemeyer, 2005; Steneri, 2003; IMF, 2003a; República Oriental del Uruguay, 2003).

The restructured domestic debt can be divided into three groups: Treasury bills maturing within the following 12 months, bonds maturing from June 2003 to May 2013 with a coupon rate indexed to LIBOR, and fixed-

583 The government only forced a reprogramming of time deposits above a specific size (Halac and Schmukler, 2003).

584 Depositors had the option of converting their claims into certificates of deposit or freely tradable bonds. These securities could also be used to cancel loans (at face value) that had been contracted with the two state banks before July 30, 2002 (IMF, 2003b).

585 Authorities committed to completing the offer if the bonds presented to the exchange, which represented (1) at least 90 percent of the total eligible debt, and (2) at least 90 percent of the total eligible debt maturing on or before December 31, 2008. These two conditions made it clear that including short-term debt was crucial. Authorities specified that with a participation lower than 80 percent, the country did not intend completing the offer, whereas if it was between 80 and 90 percent, Uruguay reserved the right to accept the transaction depending on the bonds tendered (Steneri, 2003; República Oriental del Uruguay, 2003). After the offer had closed, the central bank announced in June that it would continue accepting domestic bonds not yet submitted (Diaz-Cassou et al., 2008).

586 Only the Samurai bond included CACs. At the bondholders’ meeting, a majority of over 99 percent voted in favor of amending the payment terms. The CACs bounded dissenting holders. This was the first sovereign applying CACs in Japan (IMF, 2003a; Steneri, 2003).
rate government bonds maturing from December 2005 to February 2012.\textsuperscript{589} Bondholders were offered two options:\textsuperscript{589}

(1) A maturity extension option, which allowed for the exchange of each existing bond at par for a new bond featuring the same coupon and a five-year extension of the maturity (on average). In some cases, the new instruments were accompanied by a cash transfer and a new 30-year benchmark bond, which capitalized part of the interest earned over the first four years.

(2) Three external and four domestic benchmark bonds options were introduced, which could be exchanged at par for the old bonds. These benchmark bonds featured larger liquidity than the ones offered under the maturity extension option, unchanged coupons, and maturities ranging from 7 to 30 years (Diaz-Cassou et al., 2008). The exchange option featured cash incentives for bondholders choosing benchmark bonds with longer maturities (IMF, 2003a; Sturzenegger and Zettlemeyer, 2005; World Bank, 2005; República Oriental del Uruguay, 2003). In the case of domestic bonds, the options included bonds with progressive step-up interest rates. All new benchmark bonds envisaged CACs, and a contractual commitment to provide certain pieces of information to investors before any future modification of the bonds was sought (World Bank 2005; Sturzenegger, and Zettlemeyer, 2005; IMF, 2003a).

As eligible instruments’ remaining maturities ranged from a few days to 25 years, the debt exchange resulted in a maturity extension ranging from 5 to 30 years while keeping coupons broadly constant (Sturzenegger and Zettlemeyer, 2005; Moody’s, 2013). As a result, the exchange relieved liquidity pressures substantially with principal payments from 2003 to 2007 reduced from US$ 2.1 billion to US$ 300 million (Diaz-Cassou and others, 2008).

Holders of Treasury bills received 15 percent in cash, while the remainder was turned either into a 5.25 percent fixed-rate bond maturing in 2006 or a step-up coupon (from 4 percent to 7 percent) amortizing bond maturing from 2010 to 2018. Holders of floating-rate bonds could choose between a floating-rate bond indexed to LIBOR with a five-year maturity extension, and a slightly longer-dated benchmark bond with a step-up coupon. US$ 120 million of upfront cash payments were used to pay accrued interest on old bonds and to give an incentive to the holders of short-term debt to participate. Bonds maturing in 2003 were partly redeemed with cash, while bonds maturing in 2004 or later were not. Lastly, holders of fixed-rate bonds could choose between a

\textsuperscript{589} Floating-rate bonds featured a put option, which allowed bondholders early repayment of up to 10 percent of principal on each annual anniversary of the issue date (Sturzenegger and Zettlemeyer, 2005).

\textsuperscript{589} Holders of the Samurai bond, the global 2027, two Brady bonds, and one domestic bond could not choose (IMF, 2003b, pp. 103–04). Different restructuring procedures were used depending on the legal jurisdiction under which the old bonds had been issued. Domestic-law bonds were exchanged through custodians or a broker, or directly at the central bank. Foreign-law bonds were exchanged by submitting applications to a password-protected internet site. The Samurai bond terms were changed at a bondholders’ meeting in Tokyo.
bond with a 7.5 percent coupon and a step-up coupon bond with five to eight years maturity extensions (República Oriental del Uruguay, 2003; Sturzenegger and Zettlemeyer, 2005).\footnote{Domestic bondholders preferred, on average, to exchange floating-rate bonds for the benchmark bond option and fixed-rate bonds for the maturity extension option (IMF, 2003b).}

Authorities included several 'regulatory incentives' to encourage participation of domestic financial institutions and discourage holdouts (IMF, 2003b). The Superintendence of Banks indicated that old bonds would become non-tradable instruments thereby incentivizing pension funds, that were not allowed to hold unlisted instruments (Steneri, 2003), to participate. It also indicated that old bonds would become subject to a 100 percent risk weight (instead of a zero percent one) in the computation of banks' capital-adequacy ratios (República Oriental del Uruguay, 2003). Additionally, higher provisioning requirements were required to use old bonds as collateral.\footnote{The central bank removed the possibility of using old bonds as collateral for liquidity assistance and increased the provisioning requirement for bonds held in banks' books rated in default or selective default to more than 50 percent (the rating expected for old bonds).} Finally, offshore banks were not allowed to use old bonds to constitute mandatory deposits at the central bank (Steneri, 2003; IMF, 2003a).\footnote{Authorities also stated that in case of future debt problems, they would service the new debt in preference to the old (IMF, 2003a).}

These regulatory incentives, combined with the market-friendly and cooperative approach adopted by authorities, resulted in a quick resolution of the debt exchange and a 93 percent average participation rate (Moody's, 2013; Steneri, 2003).\footnote{One week before the expiration date, acceptance by local-law bondholders had just been 55 percent of eligible bonds, but reached 93 percent in the remaining days (IMF, 2003b). Brokers and custodians pushed domestic retail participation. International bond participation was high, but with heterogeneity among different bond classes. Participation rates for U.S. dollar global bonds were over 90 percent, whereas they were under 80 percent for euro-denominated bonds, and around 60 percent for Brady bonds (Steneri, 2003).} The participation rate for the domestic exchange was 99 percent, whereas it was 90 percent for external debt (Diaz-Cassou and others, 2008; Moody's, 2013; Sturzenegger and Zettlemeyer, 2005).\footnote{The success of the exchange was facilitated by the relatively scarce dispersion of creditors, which were mostly international, and by the low exposition of the domestic banking system to Uruguay's debt (Steneri, 2003).} The NPV losses, as estimated by Sturzenegger and Zettlemeyer (2005), ranged from 10 to 40 percent, with an average loss estimated at 23.3 percent for domestic debt. Notwithstanding the willingness to treat domestic and foreign creditors equally, NPV losses for external debt were smaller. Estimates ranged from 5 to 20 percent, with an average loss estimated at 13 percent (Sturzenegger and Zettlemeyer, 2005; Steneri, 2003).
References


Moody’s (2013). “Sovereign Default Series.” New York: Moody’s, October, pp. 6, 8, 33, 70.


Venezuela (1998)

Framing the crisis

In July 1998, Venezuela missed coupon payments of local-currency bonds held by local residents (Moody’s, 2017). The government claimed that the delay was not intentional, and that due to administrative reasons the officer in charge of signing the checks could not do it on time. The whole amount due was paid back one week later. Because these bonds had no grace period, this episode represents a one-week default on domestic currency bonds (Fitch Ratings, 2013; Moody’s, 2017).

Details on domestic debt restructuring

The default episode, which involved US$ 270 million, did not come with any face value reduction, interest reduction, or maturity extension (Moody’s, 2017).
References


Venezuela (2002)

Framing the crisis

In the early 2000s, Venezuela’s economy suffered from a prolonged period of political instability. After the failed military coup of March 2002, the anti-Chavez opposition forces tried to impose new presidential elections by declaring a general strike that lasted from December 2002 until February 2003 (Library of Congress, 2005). The strike paralyzed the oil industry and the state-run oil company PDVSA, which contributed substantially to government revenues. As a consequence, oil production fell drastically, and government revenues shrank (McCaughan, 2004). Real GDP contracted 8.86 percent in 2002, and 7.76 percent in 2003. In the same period, the poverty rate increased from 41.5 percent to 54 percent.

Most of Venezuela’s outstanding domestic debt (roughly US$ 9 billion) was scheduled to mature from 2003 to 2005 (Reuters, 2003a). In an attempt to alleviate the liquidity pressure originating from maturing bonds, Venezuela undertook several domestic debt swaps between 2002 and 2005 (Business Wire, 2002).

Details on domestic debt restructuring

In November 2002, the government announced a voluntarily swap under which maturing domestic bonds (Deuda Pública Nacional, or DPNs) were to be exchanged with longer-maturity bonds in two phases (Economist Intelligence Unit, 2003a).596 In the first phase, holders of eligible DPN bonds (maturing between December 2002 and June 2005) had the possibility of exchanging their securities for newly issued bonds with the maturity extended by one year. The interest rate was not fixed ex-ante but was to be determined in the auction. In the second phase, bondholders who participated in the first phase were given the option of further extending the maturity of their bonds by three or four years. In 2002, the total amount of obligations exchanged was close to US$ 5.13 billion, 90 percent of exchanged bonds were held by domestic private and public banks (Business Wire, 2002; Economist Intelligence Unit, 2003b; Emerging Market Daily News, 2002; Dow Jones International News, 2002).597 Maturities were extended, on average, by 20 months (Reuters, 2002b, 2002c). The participation rate in the swap was 36 percent (Emerging Market Daily News, 2002).

An additional eight voluntarily debt swaps were implemented in 2003:

1. In January, Venezuela swapped US$ 103 million of maturing domestic debt with new notes with maturities between three-and-a-half months and one year. The participation rate was 19 percent (Reuters, 2003b).

2. In February, US$ 32 million of domestic debt coming due on February 17 were swapped for new notes with maturities between 5 and 11 months. Most of the holders were private banks. The participation rate was 26 percent (Reuters, 2003c, 2003f).

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596 The exchange was not seen “as a coerced exchange” by Standard & Poor’s (Reuters, 2002b).

597 The four main private banks hold 52 percent of those bonds (Reuters, 2002a).
3. On March 21, the government swapped US$ 101 million of domestic debt coming due between the last week of March and the first week of April, and it extended maturities by 18 months (Markit, 2003). The participation rate was 59 percent (Reuters, 2003a).

4. In April, the government swapped US$ 406 million of domestic debt maturing on April 16 and May 10 for bonds with maturities between September 2004 and April 2005 (Reuters, 2003a).

5. In June, US$ 188.4 million of shortly maturing local debt was swapped for new notes, with maturities between October 2005 and January 2006. The participation rate was 49 percent (Markit, 2003b).

6. In August, US$ 87 million of maturing local-currency domestic bonds were swapped for bonds maturing in 2006. New rates were set between 22.54 and 25.95 percent against the old rate of 25.63 percent (Dow Jones International News, 2003). The participation rate was 27 percent (Markit, 2003d; Reuters, 2003g).

7. In October, US$ 57 million of maturing domestic bonds were swapped for new notes with a maturity between 6 and 24 months. The participation rate was 50 percent (Reuters, 2003d).

8. In November, the government swapped US$ 119 million of maturing debt for new bonds called Venbonos maturing between May 2004 and December 2005. The participation rate was 50 percent (Reuters, 2003e).

Three debt buyback operations were also implemented in 2004:

1. In the first months of 2004, Venezuela’s government repurchased US$ 741 million of domestic bonds, which were scheduled to mature in March, after selling US$ 1.5 billion of hybrid dollar- and bolivar-denominated bonds (Reuters, 2004c, 2004d).

2. In March 2004, Venezuela bought back US$ 573 million of domestic debt that was scheduled to mature from April 2004 to December 2005. This operation, which was funded with an additional issuance of hybrid bonds, had a participation rate of 13.64 percent and led to an extension of domestic-debt maturities ranging from four to five years (Reuters, 2004a, 2004d).

3. In April, the government repurchased US$ 133 million of domestic bonds maturing from May 2004 to December 2005. This operation had a 4.36 percent participation rate (Markit, 2004).

Finally, in January 2005, another domestic debt swap was implemented. Around US$ 940 million of domestic bonds that were maturing in 2005 were exchanged for Vebonos bonds maturing in April 2007 (Markit, 2005).

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598 In July 2003, the government planned another swap of debt due on July 25 and August 15 for newly issued Venebonos with a maturity in 30 to 42 months. U.S. $666 million were eligible for the swap. No information is available on whether the swap was implemented (Markit, 2003c).

599 This hybrid debt was packaged in new instruments called investment units (Reuters, 2004a).
References


Zimbabwe (2001)

Framing the crisis

Amid expansionary monetary policies and mounting fiscal deficits, inflation started coiling out of control in 1998 (IMF, 2005). In 1999, the country defaulted selectively on its external debt, and lost access to both official and private foreign financing (BBC, 1999; AllAfrica, 2002b). As a result, the government was forced to rely exclusively on domestic credit as a source of funding (IMF, 2003b).600

The fiscal position weakened considerably in 2000 due to inappropriate macro policies and poor governance, including a general breakdown of law and order amid a land reform program (IMF, 2002a). Deficit-to-GDP peaked at 23 percent, due to unbudgeted increases in civil service wages in the run-up to the 2000 parliamentary elections, and the increase in military expenses due to Zimbabwe’s involvement in the Democratic Republic of Congo’s conflict (IMF, 2002a).601 The Reserve Bank of Zimbabwe (RBZ) attempted to tame inflationary pressures raising interest rates. The monetary tightening, however, increased the government’s debt-service costs, which reached 18 percent of GDP, up from an average of 5 percent at the beginning of the 1990s. The government’s financing need spiked, forcing the Treasury to move debt issuance toward shorter tenors and increasing the debt-servicing burden (AllAfrica, 2002b). In 2000, the share of three-month Treasury bills in total domestic debt peaked at 95 percent.602 At the same time, the domestic share of government debt increased rapidly, reaching 52.1 percent of GDP as of end-2000 compared with 28.83 percent at the beginning of the 1990s.603 In November 2000, the government announced a debt restructuring, declaring its intention to increase the amount of domestic debt securities with a medium- and long-term maturity to at least 30 percent while lowering interest rates (IMF, 2003b; OECD/AFDB, 2002; Reuters, 2000).604 In 2001, the government began accumulating domestic and external payments arrears (IMF, 2003a, 2002a).

Details on domestic debt restructuring

In January 2001, the Zimbabwean government unilaterally restructured its domestic debt. Three-month Treasury bills amounting to Z$152.3 billion (U.S.$2.77 billion) were forcibly redeemed resorting mostly to

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600 Public companies showed unstable finances throughout the 1990s. Parastatal entities often generated losses, and accumulated arrears on their government-guaranteed domestic and foreign debt, including arrears to suppliers and to the social security and pension funds (IMF, 2002a). In January 1995, the government took over Z$3.97 billion (U.S.$458.43 million) of guaranteed debt, including interest, which was repaid from January to June 1995. U.S. dollar amounts are computed using an exchange rate of Z$8.66 per U.S. dollar (IMF, 2002b).

601 A large unbudgeted payment of benefits to war veterans occurred in 1997 (IMF, 2005).

602 Until the 1990s, long-term government stocks represented the bulk of domestic debt, while short-term Treasury bills represented only a small proportion. In 1990, long-term government stocks represented 87.5 percent of total domestic debt, while the remaining constituted short-term Treasury bills. As of end-2000, proportions had inverted (AllAfrica, 2007).

603 Commercial banks mostly held domestic debt (Sibanda and Dubihlela, 2013).

604 The remaining 70 percent would be made up of Treasury bills featuring 91-day, six-month, and one-year maturities (AllAfrica, 2001a). As reported by the Financial Times (2000), financial institutions showed their willingness to help in the operation.
credit from the RBZ (IMF, 2005). In subsequent months, the government reduced the issuance of three-month Treasury bills, and started offering bonds with maturities up to five years and low yields (IMF, 2002a). Additionally, the government approved a resolution, forcing institutional investors to hold at least 45 percent of their assets in long-term government paper starting at the end of 2001 (AllAfrica, 2001a, 2001b; OECD/AFDB, 2002). Both the debt restructuring and the easing of monetary policy reduced domestic borrowing costs. The share of domestic interest outlays in total expenditures declined from about 33 percent in 2000 to 12 percent in 2002, as the domestic debt-to-GDP dropped from 52 percent to 36 percent, and the government’s domestic borrowing requirement fell from about 20 percent of GDP to 4 percent. Thanks to the restructuring, the share of 91-day Treasury bills as a fraction of total debt declined to 29 percent by the end of 2001 (AllAfrica, 2002a, 2002b; IMF, 2003b).

Going forward, the government intended to increase the proportion of medium- and long-term debt to at least 40 percent. However, this target was never met. The market was skeptical about several government bond and stock issuances with longer tenors (Markit, 2004; AllAfrica, 2004c, 2005, 2007). The high inflationary environment reduced investor appetite for long-term bonds, and the composition of domestic debt shifted again towards shorter maturities. By the end of 2002, government debt had reverted back to the same composition prevailing before the restructuring: only 5 percent of the debt featured long-term maturities, while 95 percent featured short-term maturities (AllAfrica, 2003, 2004a, 2004b; ZIMCODD, 2019).

In 2006, the RBZ introduced a new strategy to extend the maturities of government debt. However, with inflation above 1,500 percent, the market remained skeptical about long-term bonds (Markit, 2007). As reported by the government (Ministry of Finance, 2005), Zimbabwe accumulated in 2006 Z$36,933 billion (U.S.$142.64 million) arrears on domestic bonds, around Z$40,000 billion (U.S.$154.49 million) arrears on government stocks, and Z$1,694 billion (U.S.$6.54 million) arrears on domestic loans.

Notwithstanding the government’s announcement in late 2007 to extend the maturity of domestic debt, domestic public debt service payments remained extremely high, reaching Z$5.9 trillion (more than five times the country’s GDP) in January 2008 (Ministry of Finance, 2007; Saungweme and Odhiambo, 2018).

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605 At end-2000, all Treasury bills had maturities of less than one year. We consider the entirety of outstanding Treasury bills as involved in the operation (IMF, 2003b). The government also resorted to selling or privatizing state assets to fund this redemption of Treasury bills (Reuters, 2000). U.S. dollar amounts are computed using an exchange rate of Z$55 per U.S. dollar.

606 The requirement applied to non-deposit-taking financial institutions. Until then, this requirement had not been enforced due to the lack of available long-term securities.

607 The yield on three-month Treasury bills fell from 72 percent at the end of 2000 to 39 percent in January 2001 (IMF, 2003b).

608 The original plan of the government was to issue a mix of long-term Treasury bills and government stocks (featuring a tenor between 3 and 30 years). However, given the low interest showed by investors in government stocks, mainly due to the unattractive yields offered, more Treasury bills had to be issued than initially intended (AllAfrica, 2001c, 2002a, 2004a).

609 The addition of dangling carrots, such as the exemption from withholding tax, did not help in raising investors’ appetite (Liquid Africa, 2004).

610 U.S. dollar amounts are computed by using an exchange rate of Z$258.92 per U.S. dollar. Additionally, we consider that three zeros were removed from all banknotes on August 1, 2006, as inflation soared (Munoz, 2007).

611 As reported by the government, though still mainly short-term oriented, domestic debt was composed of instruments featuring a three-year maturity (35.8 percent) and 365-day Treasury bills (64.2 percent) (Ministry of Finance, 2007).
Reflecting the impact of inflation on government operations and programs, government domestic debt stood at Z$59 sextillion at the beginning of 2008 (AllAfrica, 2009). Unprecedented hyperinflation, which reached 500 billion percent in September 2008, led to the dollarization of the economy in October and November 2008 (IMF, 2009; Leo and Moss, 2009). As a result, domestic debt obligations became worthless, allowing Zimbabwe to fully repay its local currency-denominated debt in late January 2009 (IMF, 2009).

The Zimbabwean episode also involved a deposit freeze in mid-2008, and the absorption of public enterprise debt. The government confiscated most foreign-currency accounts of domestic residents, amounting to U.S.$91 million (IMF, 2009, 2011) and, in March 2012, issued two- to four-year bonds to financial institutions in exchange for the frozen accounts (IMF, 2012). Following the dollarization, large amounts of local currency-denominated deposits remained frozen until 2013 due to the lack of agreement on the currency conversion rate (Ellyne, 2015).

By the end of 2009, the government began accumulating arrears on domestic government debt, which, following the dollarization of the economy in 2008, was entirely denominated in U.S. dollars (IMF, 2012, 2013, 2014a). As reported by the IMF (2012), Zimbabwe accumulated U.S.$48 million of domestic arrears in 2009 and around U.S.$128 million of domestic arrears in 2011. After a preliminary verification process, the stock of validated domestic payment arrears amounted to U.S.$175 million as of December 2012, which were mostly due to service providers, seed and fertilizer suppliers, employees in foreign missions, and contractors of capital projects. Authorities also underlined the existence of cross arrears problems, with the government owing utilities companies for services received, and the companies owing taxes to the Zimbabwe Revenue Authority (IMF, 2012, 2013).

Despite repayments made in 2013 had reduced the stock of arrears by U.S.$54 million (about 0.4 percent of GDP), as of December 2013 domestic arrears still amounted to U.S.$158 million, mostly in the form of pension contribution arrears (IMF, 2014a, 2014b; Ministry of Finance, 2013).

The government accumulated additional domestic arrears in the following years. The outstanding stock of arrears amounted to U.S.$178 million in 2014, U.S.$125 million in 2015, U.S.$149 million in 2017, and U.S.$185 million in 2018 (IMF, 2016, 2019; Ministry of Finance, 2013, 2018). Authorities settled part of these arrears through the issuance of Treasury bills (Ministry of Finance, 2018). As additional unpaid claims toward suppliers were accumulated in 2019, we do not assign an end date to this episode (Ministry of Finance, 2020).

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612 In 2009, the economy abandoned the local currency and adopted both the U.S. dollar and the South African rand as official currencies (Sibanda and Dubhilela, 2013).

613 The remainder of domestic debt obligations was foreign-currency denominated (Leo and Moss, 2009).


615 Information on when these deposits were finally converted remains elusive.

616 The December 2012 value also reflected a partial clearance of some overdue obligations (IMF, 2012).

617 The government also committed to ring-fencing any portions of diamond revenues realized above the budgeted amount to use it for clearance of verified domestic payment arrears in 2013 (IMF, 2013).
The episode also involved the absorption of the RBZ’s defaulted debt by the government. In November 2013, the government and the RBZ approved the “RBZ Debt Assumption Bill” through which the government took over the RBZ’s domestic and foreign liabilities (“legacy debt”) amounting, respectively, to U.S.$754 million and U.S.$596 million (AllAfrica, 2013a, 2013b; IMF, 2014b). The RBZ’s defaulted debt also included domestic arrears due to local banks, and foreign currency-denominated loans owed to resident companies (Reserve Bank of Zimbabwe, 2015; Reserve Bank of Zimbabwe Debt Assumption Act). Additionally, the government committed to repaying loans and advances received by the RBZ over the years, which amounted to U.S.$686.74 million in 2015, and were classified as past due and impaired (Reserve Bank of Zimbabwe, 2015). Following the enactment of the bill into law on August 7, 2015, the government started issuing Treasury bonds featuring maturities ranging from one to eight years and an annual interest rate of 5 percent (Reserve Bank of Zimbabwe, 2016; IMF, 2015b). In June 2019, the government restructured and extended the maturity of a fraction of the debt held by the RBZ due to the unexpected expenditures caused by Cyclone Idai and the 2018–19 drought (Ministry of Finance, 2018).

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618 Domestic debt stock was to be cleared through issuance of government securities, while the external debt was part of the External Debt Resolution Strategy (Ministry of Finance, 2013; IMF, 2015a).

619 The RBZ Debt Assumption Bill was submitted to the Parliament in April 2014 (IMF, 2014b). According to the bill, a 5 percent interest rate was set for all debt assumed by the government, which was applied from the date the debt was contracted until the final payment date (see Reserve Bank of Zimbabwe Debt Assumption Act).

620 Following the change of the RBZ Act in 1999, the government removed the time limit for repayment of loans advanced granted by the RBZ to the government (Ellyne, 2015).
References


Ellyne, Mark J. (2015). “Lessons from Zimbabwe’s Hyperinflation and Dollarization,” August, pp. 7, 21,


International Monetary Fund (2002a). “Zimbabwe: 2001 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; Statement by the Executive Director for Zimbabwe and Statement by the Authorities of Zimbabwe,” Country Report No. 02/125. Washington: IMF, June, pp. 5–8, 19, 48–49,
——— (2003a). “Zimbabwe: 2003 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director

No. 19/144. Washington: IMF, May, p. 5,
https://www.imf.org/en/Publications/CR/Issues/2019/05/31/Zimbabwe-Staff-Monitored-Program-

Leo, Benjamin, and Todd Moss (2009). “Moving Mugabe’s Mountain: Zimbabwe’s Path to Arrears
Clearance and Debt Relief,” Working Paper 190. Washington: Center for Global Development,
November, p. 8,


Ministry of Finance, December, pp. 254–55,

pp. 26–27,


35–36,

DC_English.pdf.

Working Paper WP/07/98. Washington: International Monetary Fund, April, p. 10,


