

**EXECUTIVE
BOARD
MEETING**

SM/22/2
Correction 1

CONFIDENTIAL

January 20, 2022

To: Members of the Executive Board

From: The Secretary

Subject: **El Salvador—Staff Report for the 2021 Article IV Consultation**

Board Action: The attached corrections to SM/22/2 (1/7/22) have been provided by the staff:

Evident Ambiguity **Pages 7, 24, 32, 35 (upper left chart), 50, 61**

Factual Errors Not Affecting the Presentation of Staff's Analysis or Views **Pages 10, 35 (bottom left chart), 36, 43, 52, 54, 96**

Typographical Errors **Pages 17, 56, 64, 87**

Questions: Ms. Carare, WHD (ext. 39749)
Mr. Yakhshilikov, WHD (ext. 34471)

CONTEXT

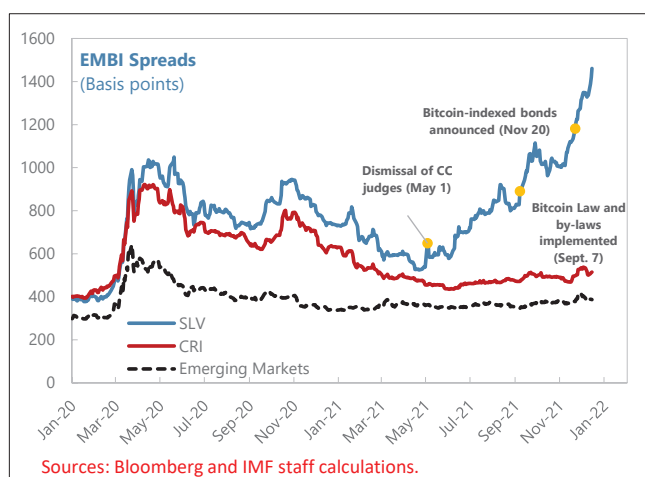
1. Pre-pandemic, the economy had a long stretch of inclusive growth that coincided with macroeconomic and financial stability. In the past two decades the economy grew on average 2¼ percent and inequality and poverty declined (the latter to 22.8 percent pre-pandemic, household survey) (Figure 1). However, growth remained below regional peers, primarily due to low investment rates, and it was insufficient to generate enough formal jobs. Banks maintained sound balance sheets and high liquidity buffers, but financial inclusion remained low.

2. Against this backdrop, public debt vulnerabilities emerged. Despite an improvement in the primary fiscal balance by 2¾ percent of GDP over 2013-18, public debt continued to rise due to unfavorable debt dynamics and unaddressed fiscal structural issues. Fiscal deficits were financed increasingly by Eurobonds, with average coupon rates double the nominal growth rate of the economy. Pension costs—stemming from the 1998 reform—increased, adding to the large stock of public debt (71 percent of GDP by end-2019, including pensions).

3. President Bukele was elected in 2019 on an inclusive growth and anti-corruption agenda, marking a break from the two-party system that has dominated El Salvador politics since the end of the civil war in 1992. In his first two years of a five-year mandate President Bukele enjoyed high approval ratings (over 85 percent, CID Gallup), while governing with limited support in the LA (11 out of 84 seats).

4. The authorities' response to the COVID-19 pandemic was timely and effective, but public debt vulnerabilities increased, nonetheless. The immediate deterioration of the fiscal position at the onset of the pandemic created a sizable financing gap. Delays in the LA's approval of the use of funds contracted from international financial institutions (IADB and CABEL)—and catalyzed by the disbursement of the RFI in April 2020—necessitated recourse to expensive market financing, which further elevated public debt by almost 20 percentage points of GDP in 2020.

5. More recently, concerns about the overall direction of policies led to a significant increase in El Salvador's sovereign risk premium. In May 2021, President Bukele's *Nuevas Ideas* party gained a supermajority in the LA, with an agenda focused on social issues and "building a free El Salvador". The new Assembly swiftly overhauled the judicial system, and enacted legislation to adopt Bitcoin as legal tender. Reflecting high and rising gross fiscal financing needs starting in 2022, and

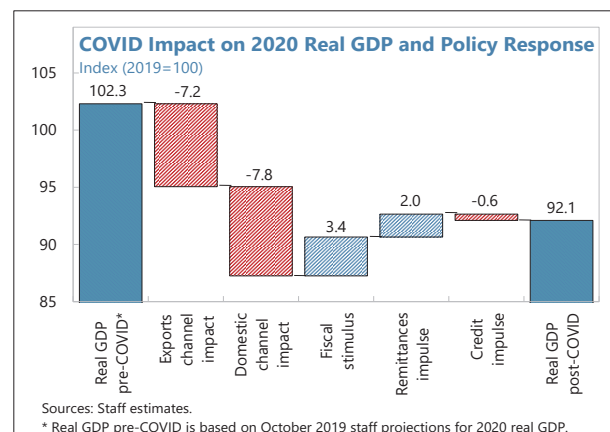


10. The authorities' strong policy response and robust remittances helped cushion the economic contraction in 2020.

Staff estimates that in the absence of the fiscal support and resilient remittances, the economy could have contracted twice as much (text chart) as the recorded 7.9 percent.²

11. Gross international reserves declined, as expected.

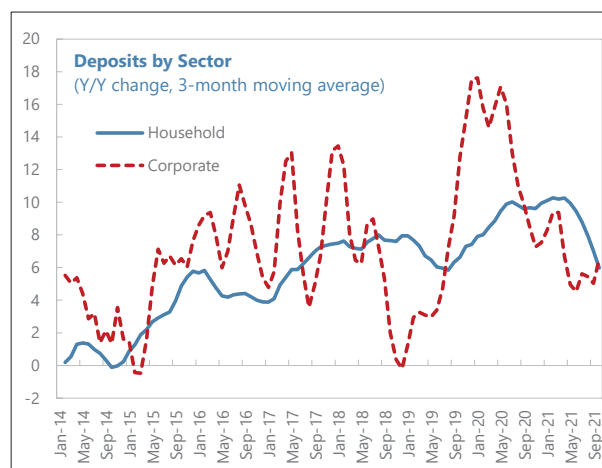
The reduction in banks' reserve requirements and resulting capital outflows by banks (as they paid down debt or increased their net foreign assets) led to a decline in gross international reserves of US\$1.4 billion (4¼ percent of GDP), to US\$3 billion at end-2020. While international reserves at end-2020 remained above 3 months of imports, they were inadequate according to the IMF metric (see Annexes III and IV).



B. The 2021 Recovery

12. The recovery has been strong, but growth momentum waned in mid-2021.

Real GDP declined by 2.3-0.9 percent quarter-over-quarter in 2021Q2, after a strong growth in 2021Q1 (3.6-3.2 percent q-o-q, see chart), due to a deceleration in private consumption. Rising inflation (5½ percent by October) started eroding the gains in nominal wages in 2020 (chart). In 2021Q3 industrial production, total employment in the formal sector and private sector wages continued to grow, but at lower rates, and already reached their pre-pandemic levels. Real GDP is expected to reach pre-pandemic levels in 2021Q3, and annual 2021 growth is expected to reach 10 percent, in large part due to a carryover effect from 2020 (7 percent). The output gap remains negative, as some slack remains in the services sector. Cumulatively, in the first nine months of the year, nominal exports and remittances recorded growth rates above 30 percent compared to 2020, but a robust increase in imports is widening the trade deficit.³ The SDR allocation of about US\$390 million (SDR 275.3 million) is being used to bolster international reserves.



² The COVID-19 impact is measured as the difference between the 2020 real GDP projection done at end-2019, and the actual value. Contribution of real exports, remittances, and credit to GDP, were calculated as contributions to real GDP growth; contribution of fiscal policy was calculated using the regular multiplier to the fiscal impulse.

³ The import rally is likely to continue in the last quarter of 2021, as large energy and capital goods imports are needed for the launch of key electricity projects (see ¶22). The external position appears to be in line with the level implied by medium-term fundamentals and desirable policies (see Annex IV).

for US\$ 1 billion, and bonds collateralized with the future stream of revenues for two public companies for US\$1.6 billion (5½ percent of GDP).¹⁷ More consolidation measures are needed in 2022 to implement a more prudent fiscal position that also requires less financing.

26. Bold fiscal decisions are needed to restore public debt sustainability. Absent consolidation measures, the unidentified financing gap is large (cumulative 2022-26 about US\$8 billion or 28 percent of GDP).¹⁸ The large needs are explained, among others, by recurrent Eurobond amortization—about 2½ percent of GDP per year biannually, starting in January 2023. Assuming it can be filled with (expensive) market sources, public debt will rise to about 96 percent of GDP (including pensions) by end-2026 (Table 2).¹⁹ Under current policies, public debt is on an unsustainable path (Annex II).

27. A prudent fiscal policy would support growth while restoring fiscal sustainability. A consolidation package of about 4 percent of GDP over 2022-24 would help restore fiscal sustainability. Such package—in line with the efforts done by other countries in the region—would lead to a decline in the public debt ratio below 80 percent by end-2026. Implementing consolidation measures in 2022 would bring the 2022 budget closer to the pre-pandemic NFPS deficit level and are needed given the financing constraints. Given the strong recovery, having the bulk of the adjustment occurring in 2022 and 2023 will help build confidence effects by lowering spreads, and help relieve those financing constraints.²⁰ Such consolidation effort would support external buffers too. Relying on leverage and thus increasing public debt to invest in Bitcoin with the expectations of its continuous rise in price, while also timing the market to acquire Bitcoin, is not a permanent solution to ease financing constraints. Measures should be designed to support the vulnerable, minimize adverse distributional effects, and ultimately achieving historical medium-term growth rates (see text table for an illustrative scenario).

¹⁷ The companies are ANDA, a water utility company, and FOVIAL a public fund responsible for roads maintenance. The securitization model follows the LaGEO experience (see box in Annex II).

¹⁸ The government has a small stock of deposits (about ¾ percent of GDP). These are for project financing in earmarked accounts and cannot be used as free disposal resources for discretionary budget financing.

¹⁹ Staff assumed that all short-term debt will be rolled over, pension system will remain unchanged (private pension funds absorbing pension bonds), and, to obtain the upper band of external credit costs, Eurobonds will be placed at about 12 percent spreads plus the coupon of same maturity US Treasury bonds. On November 20, the authorities announced that they will issue US\$1 billion in 10-year bond in tokenized U.S. dollars in 2022. The bond, first in a US\$ 5 billion series, will be issued under an upcoming electronic securities law, and it will offer a 6½ percent coupon and a “Bitcoin dividend”, starting with the sixth year, to be paid from disinvesting in Bitcoin (half of the proceeds from the bond sale will be invested in Bitcoin). The other half of the proceeds will be used for infrastructure including the development of “Bitcoin city”, a charter city located near the gulf of Fonseca where no taxes will be paid other than the VAT. Moreover, those estimated needs do not include those infrastructure plans. However, the bond may help release some financing constraints since it targets a different niche of investors (households which can buy US\$100 securities, investors which could receive permanent residence permits for ~~US\$100,000~~ US\$100,000, and institutional investors that are not allowed to invest directly in Bitcoin due to regulations and are searching for higher yield).

²⁰ Upfront comprehensive governance reforms, credible announcements of well-designed structural fiscal reforms along with measures to maintain financial stability and strengthen debt management (Annex VII) are also needed to bring down spreads.

43. Continuing to strengthen the safeguards of the central bank is critical to increase buffers. Following a Safeguards Assessment in 2020, the BCR has started to draft amendments to the central bank law to strengthen its autonomy and governance and adopted a policy to select and appoint external auditors. The BCR is taking initial steps to phasing out quasi fiscal activities and prepare the adoption of the International Financial Reporting Standards (IFRS) expected in 2024. Staff will engage with the authorities to speed up the adoption of IFRS and the settlement of the large debt from Treasury, which is not progressing as expected.

Authorities' Views

44. The authorities broadly agreed with the advice on economic governance, AML, and central bank safeguards. On fiscal transparency the authorities agreed with the need for a procurement reform, collecting beneficial ownership data, and publishing the report of all audit recommendations and the government response. The Ministry of Finance stated that they are already in the process of implementing a compilation and registration of the beneficial owners through COMPRASAL²⁸ and of reforming the FOPROMID manual. On anti-corruption the Attorney General mentioned that domestic legislation could be modernized, and due process is followed in pending investigations. On AML, the authorities indicated willingness to further refine the draft law in line with staff advice. On safeguards, the authorities noted that they are amending the central bank law and reiterated that without a settlement of the Treasury debt, it would be difficult for the central bank to migrate towards IFRS.

BITCOIN AS LEGAL TENDER, AND “CHIVO” A NEW MEANS OF PAYMENTS

45. El Salvador became the first country to adopt Bitcoin as an official currency with legal tender status²⁹ (alongside the U.S. dollar). On June 8, 2021, a law (the “Bitcoin law”) was adopted, establishing that the U.S. dollar will be used as a reference currency for accounting purposes, and mandating the acceptance of Bitcoin by economic agents in exchange for goods and services. The law also guarantees automatic conversion from Bitcoin to U.S. dollars, through a trust fund. In 90 days, the authorities adopted all Bitcoin regulations needed for the Bitcoin ecosystem³⁰ and introduced the e-wallet, *Chivo*, thereby fully implementing the law on September 7.

46. The government strongly supports its new digital means of payments. *Chivo* operates by default in U.S. dollars, but can accept Bitcoins, if offered, at the time of each transaction, and holds balances in U.S. dollars and Bitcoin.³¹ To foster the use of *Chivo* the government provides a one-time endowment of the equivalent to US\$30 in Bitcoins to every [Salvadoran](#) *Chivo* user, and

²⁸ The website of public purchases (COMPRASAL).

²⁹ Henceforth for brevity, we will use “Bitcoin as legal tender.”

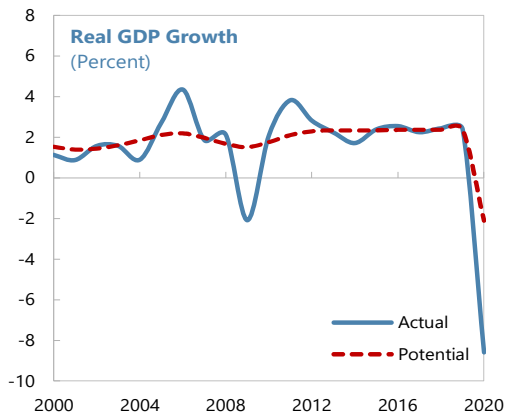
³⁰ Other regulations: Bitcoin Law implementing Regulation, Bitcoin Trust Fund Law, and two BCR Technical Standards.

³¹ Prices are listed in stores in U.S. dollars. *Chivo* lists the customer’s balance in both currencies at any time.

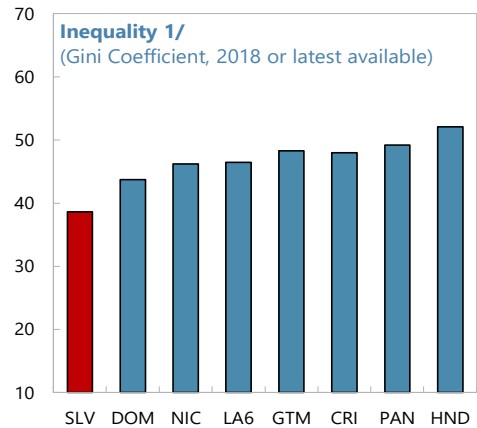
Figure 1. El Salvador: Long-Term Growth and Poverty

Structural bottlenecks have inhibited long-term growth

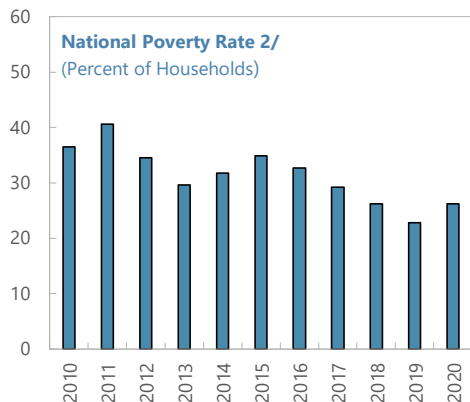
Pre-pandemic the country has experienced solid economic growth...



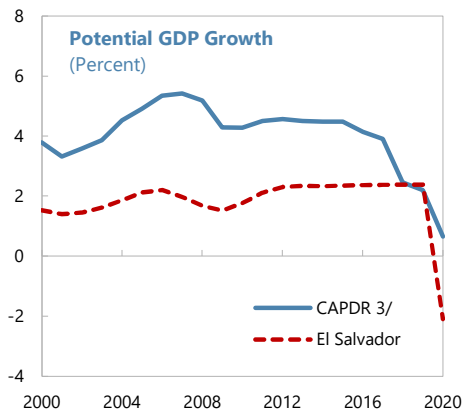
...with low inequality.



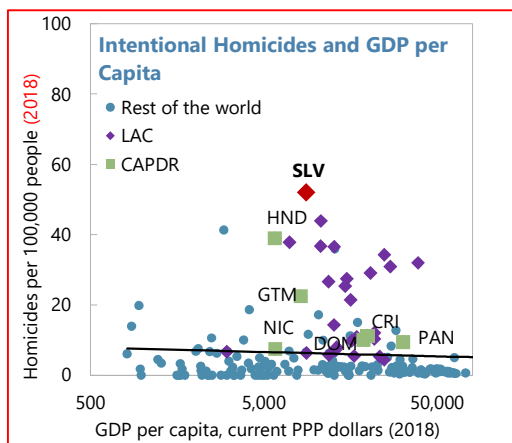
But poverty remained relatively high and expected to rise because of the pandemic...



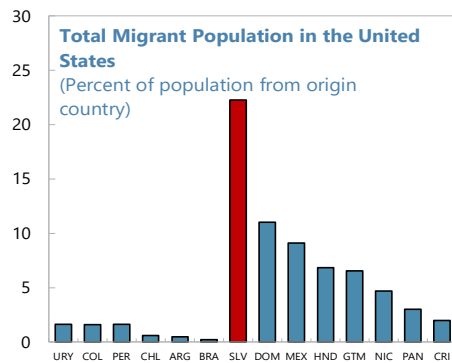
...and growth was below regional CAPDR rates.



Pre-pandemic crime declined, but remained high...



...contributed over time to outward migration, along other factors.



Sources: National authorities, IMF staff calculations, World Development Indicators and United Nations Population Division.

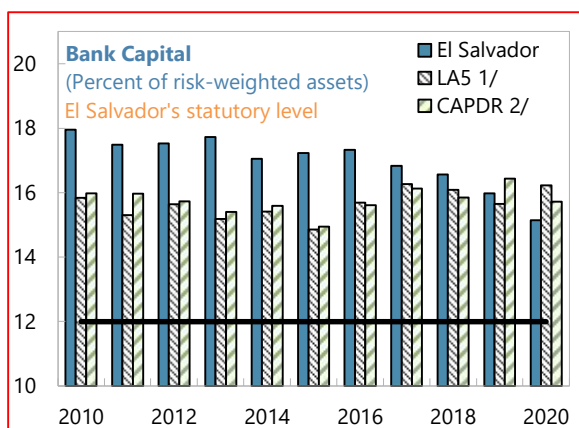
1/ Gini coefficient for GTM and NIC are as of 2014. Simple average of Brazil, Chile, Colombia, Mexico, Peru and Uruguay.

2/ El Salvador poverty line covers the percent of population lacking household income required to access a basket of goods and services needed to achieve adequate living conditions. Poverty numbers are as of 2014 for GTM and 2016 for PAN, NIC and DOM.

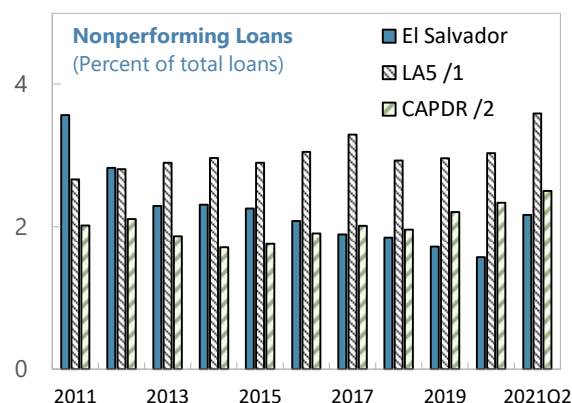
3/ Simple average of Costa Rica, Guatemala, Honduras, Nicaragua, Panama, and the Dominican Republic.

Figure 4. El Salvador: Financial Sector Developments

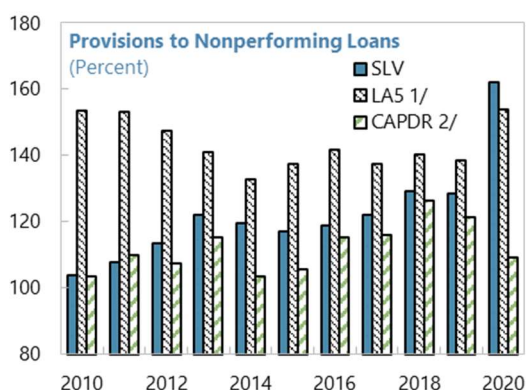
Banks' capital buffers remain high...



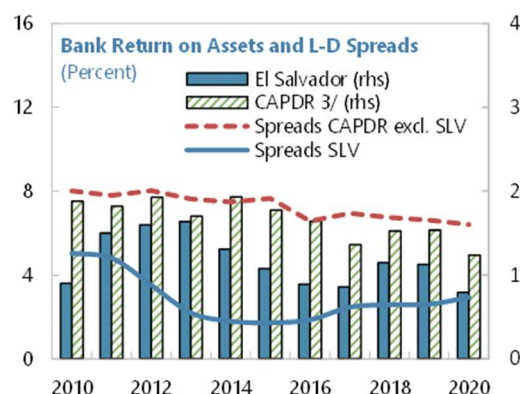
...amid the rise in non-performing loans caused by the unwinding of debtor-relief measures.



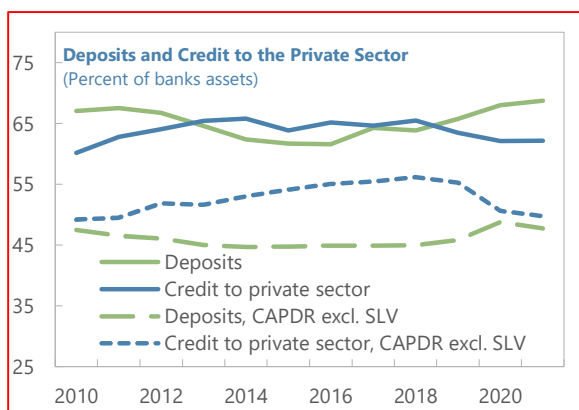
Amid increased provisioning...



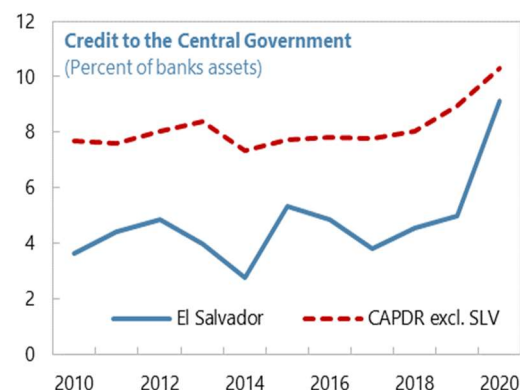
...strained banks' profitability despite widening of interest margin.



Deposit growth begins to slow and credit to private sector begins to recover...



...while credit to the central government increased.



Sources: National authorities, IMF Financial Soundness Indicators, and IMF staff calculations.

1/ Simple average of Brazil, Chile, Colombia, Mexico, and Peru.

2/ Simple average of Costa Rica, Guatemala, Honduras, Panama, and the Dominican Republic.

3/ CAPDR for year 2015 includes Costa Rica, Honduras and Guatemala.

Table 1. El Salvador: Selected Economic Indicators¹

I. Social Indicators									
Rank in UNDP Development Index 2019 (of 189)	124		Population (million, 2020)		6.5		6.3		
Per capita income (U.S. dollars, 2020)	3,799		Life expectancy at birth in years (2019)				73		
Percent of pop. below poverty line (2020)	26		Infant mortality (per 1,000 live births, 2019)				13		
Gini index (2019)	39	35	Adult literacy rate (% ages 15 and older, 2019)				89		
II. Economic Indicators (percent of GDP, unless otherwise indicated)									
	2014	2015	2016	2017	2018	2019	2020	Proj.	
								2021	2022
Income and Prices									
Real GDP growth (percent)	1.7	2.4	2.5	2.2	2.4	2.6	-7.9	10.0	3.2
Consumer price inflation (average, percent)	1.1	-0.7	0.6	1.0	1.1	0.1	-0.4	3.5	2.8
GDP deflator (percent)	1.0	1.3	0.7	1.0	1.7	0.7	-0.5	2.8	2.4
External Sector									
Current account balance	-5.4	-3.2	-2.3	-1.9	-3.3	-0.6	0.5	-3.9	-2.5
Trade balance	-23.4	-21.2	-19.2	-19.4	-21.7	-21.2	-21.1	-28.7	-28.4
Exports (f.o.b.)	19.0	18.9	17.9	18.7	18.2	17.7	16.9	18.4	18.6
Imports (f.o.b.)	42.4	40.1	37.1	38.1	39.9	38.9	38.0	47.1	47.0
Services and income (net)	-0.7	-0.6	-1.8	-2.6	-2.3	-0.4	-2.6	-1.3	-0.6
Transfers (net)	18.8	18.6	18.8	20.2	20.6	21.0	24.2	26.1	26.5
Foreign direct investment	-1.4	-1.7	-1.4	-3.6	-3.2	-2.4	-0.8	-2.8	-1.9
Gross international reserves (millions of U.S. dollars)	2,693	2,787	3,238	3,567	3,569	4,446	3,083	3,510	3,980
Nonfinancial Public Sector									
Overall balance	-4.0	-3.6	-3.1	-2.5	-2.7	-3.1	-8.2	-5.8	-4.9
Primary balance	-1.3	-0.9	-0.2	0.7	0.9	0.6	-3.8	-1.1	0.0
Of which: Tax burden	16.7	16.7	17.2	17.6	18.0	17.7	18.5	20.4	20.9
Gross debt 2/	65.3	67.0	68.8	70.5	70.4	71.3	89.2	84.4	84.8
National Savings and Investment									
Gross domestic investment	16.4	16.0	16.0	16.7	18.4	16.9	17.9	18.5	17.7
Private sector 3/	14.4	13.5	13.5	14.1	15.7	14.2	15.7	15.8	14.5
Public sector	2.0	2.5	2.5	2.6	2.7	2.6	2.2	2.6	3.2
National savings	11.0	12.8	13.7	14.8	15.1	16.3	18.4	14.5	15.2
Private sector	12.3	13.7	13.7	14.7	14.7	16.4	24.0	17.3	16.4
Public sector	-1.3	-0.9	0.0	0.1	0.4	-0.1	-5.6	-2.7	-1.2
Money and Credit									
Credit to the private sector	49.5	50.2	51.2	52.2	53.5	55.3	62.1	57.6	56.3
Broad money	48.6	50.1	50.0	53.8	54.8	59.0	70.2	65.7	65.1
Interest rate (time deposits, percent)	3.8	4.2	4.4	4.4	4.2	4.3	4.1	3.9	...
Net Foreign Assets of the Financial System									
Millions of U.S. dollars	2,189	1,904	1,995	2,645	2,714	3,424	3,046	3,303	3,836
Percent of deposits	21.2	17.4	17.7	21.2	20.5	23.2	18.6	19.2	21.3
Memorandum Items									
Nominal GDP (billions of U.S. dollars)	22.6	23.4	24.2	25.0	26.0	26.9	24.6	27.9	29.4
Terms of trade, percent change	-1.3	15.6	6.1	-4.3	-3.9	0.8	6.0	-5.4	3.4
Real effective exchange rate (+ = appreciation)	1.8	4.5	-1.0	-3.5	1.1	-2.6	-2.3	-0.7	...
External sovereign bond spread (basis points)	400	497	599	520	424	453	760	837	...

Sources: Central Reserve Bank of El Salvador, Ministry of Finance, and IMF staff estimates.

1/ Projections reflect unchanged policies scenario, including no additional spending on Bitcoin, and no large benefits to the economy from using Bitcoin as legal tender and Chivo wallet (see Box 2/ Nonfinancial public sector, including CIP-A pension bonds. Does not include "Bitcoin" bonds.

3/ Includes inventories.

Table 6. El Salvador: Public Sector Financing Requirements and Sources¹
(In millions of U.S. dollars and percent of GDP)

	2017	2018	2019	2020	Projections					
					2021	2022	2023	2024	2025	2026
	(Millions of U.S. dollars)									
Gross Financing Requirements	2,517	2,018	3,059	3,847	4,086	4,598	5,737	5,297	6,620	5,383
Overall deficit	632	704	825	2,018	1,610	1,447	1,569	1,643	2,024	2,071
Public debt amortizations	1,886	1,314	2,234	1,400	1,831	2,036	3,053	2,540	3,481	2,197
External	604	458	1,082	349	312	309	1,386	789	1,357	435
Multilateral and bilateral	604	458	282	349	312	309	586	789	557	435
Bonds	0	0	800	0	0	0	800	0	800	0
Domestic	1,282	856	1,152	1,051	1,519	1,727	1,667	1,751	2,124	1,762
o.w. Short-term debt (LETES) 2/	1,105	813	896	1,009	1,355	1,424	1,495	1,570	1,570	1,570
Other	0	0	0	429	646	1,115	1,115	1,115	1,115	1,115
Sources of Financing	2,517	2,018	3,059	3,847	4,086	4,598	5,737	5,298	6,621	5,384
Domestic	1,563	1,470	1,475	2,210	2,680	2,896	3,199	3,198	3,321	3,343
Pension bonds	560	366	346	271	313	279	272	265	260	253
Drawdown of deposits	15	16	-3	-65	65	0	0	0	0	0
Short-term debt (LETES) 2/	732	833	991	1,427	1,424	1,495	1,570	1,570	1,570	1,570
Others	255	255	141	577	878	1,122	1,357	1,363	1,491	1,520
External	955	548	1,584	1,637	1,406	1,702	2,538	2,100	3,300	2,041
Multilateral and bilateral 3/	354	548	287	798	1,406	702	838	700	700	841
Bonds	601	0	1,297	839	0	1,000	1,700	1,400	2,600	1,200
Unidentified Financing	0	0	0	0	0	0	0	0	0	0
	(Percent of GDP)									
Gross Financing Requirements	10.1	7.8	11.4	15.6	14.7	15.6	18.8	16.7	20.3	16.0
Overall deficit	2.5	2.7	3.1	8.2	5.8	4.9	5.1	5.2	6.2	6.2
Public debt amortizations	7.5	5.0	8.3	5.7	6.6	6.9	10.0	8.0	10.7	6.5
External	2.4	1.8	4.0	1.4	1.1	1.0	4.5	2.5	4.2	1.3
Multilateral and bilateral	2.4	1.8	1.0	1.4	1.1	1.0	1.9	2.5	1.7	1.3
Bonds	0.0	0.0	3.0	0.0	0.0	0.0	2.6	0.0	2.4	0.0
Domestic	5.1	3.3	4.3	4.3	5.5	5.9	5.5	5.5	6.5	5.2
o.w. Short-term debt (LETES) 2/	4.4	3.1	3.3	4.1	4.9	4.8	4.9	5.0	4.8	4.7
Other	0.0	0.0	0.0	1.7	2.3	3.8	3.7	3.5	3.4	3.3
Sources of Financing	10.1	7.8	11.4	15.6	14.7	15.6	18.8	16.8	20.3	16.0
Domestic	6.3	5.6	5.5	9.0	9.6	9.8	10.5	10.1	10.2	9.9
Pension bonds	2.2	1.4	1.3	1.1	1.1	0.9	0.9	0.8	0.8	0.8
Drawdown of deposits	-1.1	0.0	0.0	-0.3	0.2	0.0	0.0	0.0	0.0	0.0
Short-term debt (LETES) 2/	2.9	3.2	3.7	5.8	5.1	5.1	5.1	5.0	4.8	4.7
Others	1.0	1.0	0.5	2.3	3.2	3.8	4.4	4.3	4.6	4.5
External	3.8	2.1	5.9	6.6	5.0	5.8	8.3	6.6	10.1	6.1
Multilateral and bilateral 3/	1.4	2.1	1.1	3.2	5.0	2.4	2.7	2.2	2.1	2.5
Bonds 4/	2.4	0.0	4.8	3.4	0.0	3.4	5.6	4.4	8.0	3.6
Unidentified Financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Central Bank; Department of the Treasury; and IMF staff estimates.

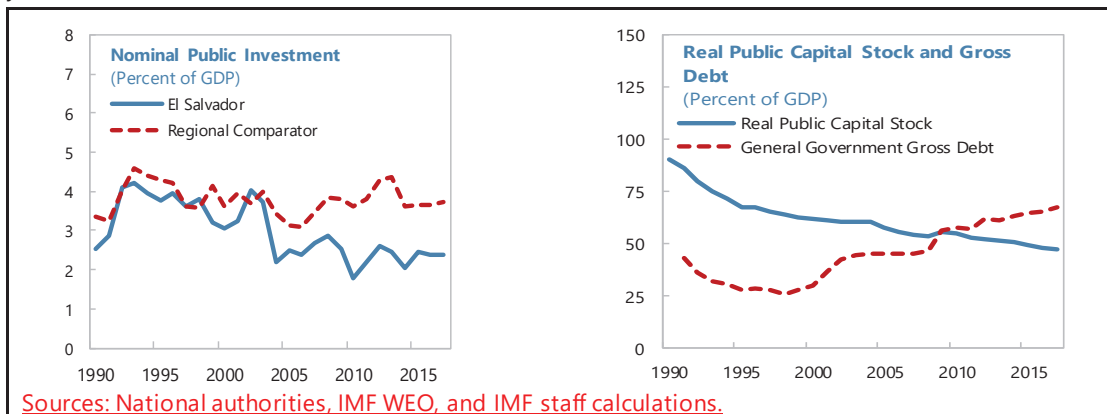
1/ All budgetary costs incurred or committed in 2021-2021 related to the adoption of Bitcoin as a legal tender and the implementation of Chivo are included, but no further buying of Bitcoin is included.

2/ The entire amount of LETES is recorded under domestic financing given that the market has always been dominated by resident investors. However, a relatively small amount of LETES (about 80 million of U.S. dollars at end-2017) has been held by foreign residents.

3/ Per article 148 of the Constitution, all loans must have two votes in the Legislature. One authorizing the Treasury for negotiations and one approving the loan contract. The last one requires qualified majority. Additionally, decree 608/2020 states that the Legislature should also approve the budget incorporation of each loan after it is disbursed.

Box 3. Ensuring Effectiveness and Efficiency of Public Spending and Reducing Risks

The efficiency of public investment spending continues to be low in El Salvador. Despite efforts to increase public investment, capital expenditure execution rates remain below 70 percent. Most difficulties originate from weaknesses in generating a pipeline of well-evaluated projects. Project design and environmental and social studies are prepared *after* the project has been budgeted, leading to significant delays and cost-overruns.

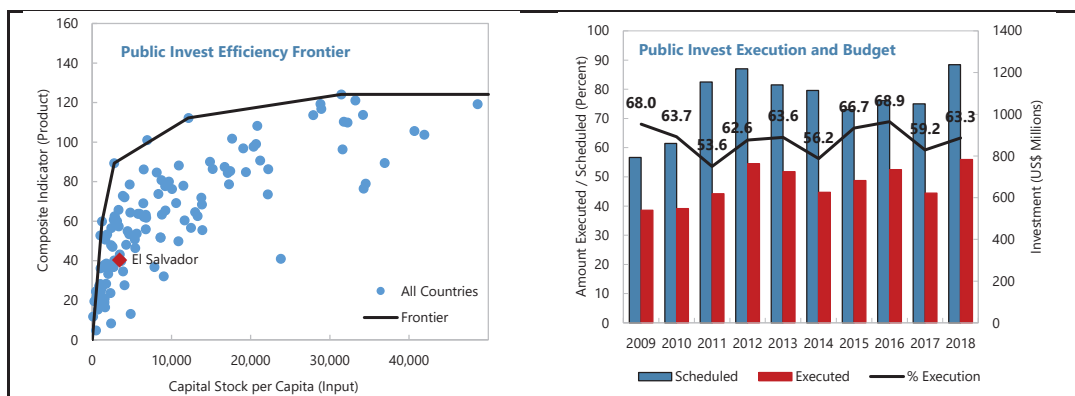


Sources: National authorities, IMF WEO, and IMF staff calculations.

Proper project evaluation and design will be essential to improving the effectiveness of public investment. International evidence shows that cost overruns and implementation delays often originate from misdirected pressure for “accelerating” project preparation or implementation.

Concrete measures to improve the effectiveness and efficiency of public investment in El Salvador, as identified in Fund technical assistance on Public Investment Management Assessment and Public Financial Management, include:

- Moving from an annual to multi-year approach to preparing public investment projects aligned to the existing Medium-Term Fiscal Framework, and to a programmatic structure involving capital and current expenditure in joint programs. This would help plan and obtain proper financing.
- Including project evaluation for all investment projects at an early stage, regardless of the source of funding. This would help ensure that projects are ready to be implemented when they are funded.
- Allocating sufficient funds for project development, including evaluation and engineering design (prefeasibility stage), for approved projects to be ready for procurement when budgeted.
- Improving the quantification of fiscal risks related to the financial performance (including of municipalities, SOEs, and those associated with PPP contracts). This would help mitigate those risks.



Sources: National authorities PIMA 2019, and IMF staff calculations.

Box 4. Financial Inclusion, Bitcoin and *Chivo* (concluded)

Bitcoin tourism is estimated to attract an additional US\$5 million (0.03 percent of GDP) in travel receipts per year.

Prospects of Bitcoin-miners investment in harnessing renewable energy appear limited, as the average cost of geothermal-generated electricity of 9 cents/Kwh exceeds the highest price (affordable for Bitcoin mining) of 4 cents/Kwh. Staff estimates that mining at the current energy tariffs is not profitable for Bitcoin price above US\$45,000—since it is more energy-demanding and therefore costly to mine Bitcoin the higher the Bitcoin price is (Figure 5b). Public energy company CEL is conducting pilot project of mining Bitcoin on geothermal energy, with current capacity of 1 Mw/h, extendable to 15 Mw/h next year.

The *Chivo* wallet could speed up the use of digital payments. In the first month of operation, according to the authorities, 99 percent of peer-to-peer transactions on *Chivo* platform were conducted in U.S. dollars. Staff's estimation of these benefits requires data confirmation.

Against these potential benefits, the initial costs reached US\$180 million (including transfers to Bitcoin trust fund of US\$150 million, and cash transfers of US\$30 million). Additional costs could arise from direct and/or indirect subsidizing of Bitcoin mining (including the cost of Bitcoin mining machines of US\$1 million for each 1 Mw/h electricity use, the cost of electricity price differential—between tariff and mining breakeven cost—of US\$0.5 million for each 1Mw/h electricity use, and maintenance and connectivity costs).

To improve the ease of use, *Chivo* is linked with other payments networks, and the government is installing ATMs. *Chivo* has partnerships to connect its services to the credit/debit cards network worldwide, and to the domestic payments system—through a state-owned bank. Consequently, funds can be deposited in *Chivo* in U.S. dollars by credit/debit cards or from domestic bank accounts, and in Bitcoin through other e-wallets. Once funds are uploaded, remittances or any other payment can be sent and received through *Chivo* in U.S. dollars or Bitcoins. Cash can also be uploaded and withdrawn from *Chivo*, through ATMs. The authorities plan to install over 200 ATMs across El Salvador and 50 ATMs in the U.S. This will enable the unbanked population to deposit and withdraw cash in the system.

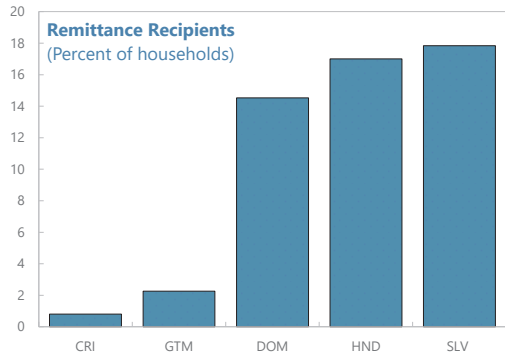
1/Bitcoin is used for economic transactions in El Salvador since 2019, in the small village El Zonte. Additionally, some migrants have also sent remittances in Bitcoin; in May 2021, Bitcoin remittances to El Salvador amounted to US\$1.7 million, equivalent to 0.2 percent of all remittances received during that month.

2/*Chivo* is providing its services in Bitcoins through second-layer payment protocols (Algorand) and agreements with other private providers.

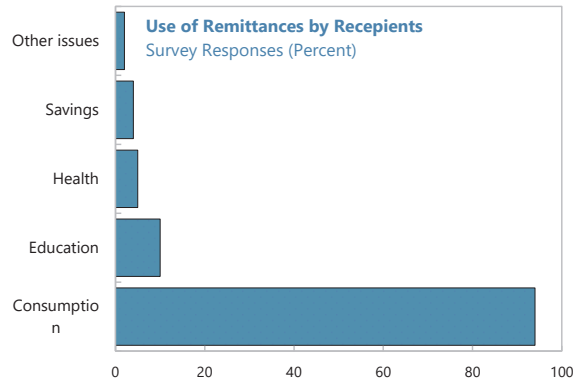
3/Staff assume the same number of individuals remitting the same amounts as before. While the *Chivo* wallet offers an option of peer-to-peer transaction in U.S. dollars at zero fee, the scope of savings for unbanked migrants is limited by the lack of access to *Chivo* ATM infrastructure in the U.S. (50 machines). Banked migrants could upload funds in *Chivo* using debit/credit cards and bank accounts for zero-fee peer-to-peer transactions, similar to zero-fee offered by major remittances operators, such as [Western Union](#) [MoneyGram](#). In the latter case, Bitcoin is not needed for transfers.

Figure 5a. El Salvador: Remittances, Fees, and Mobile Inclusion

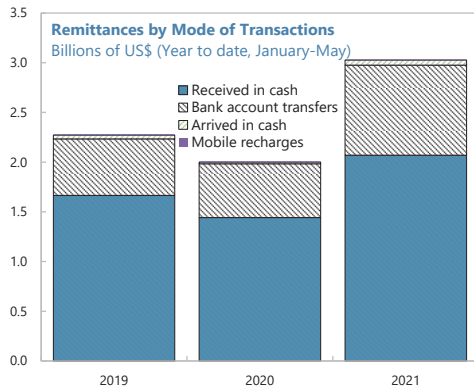
1/5 of Salvadoran families receive remittances...



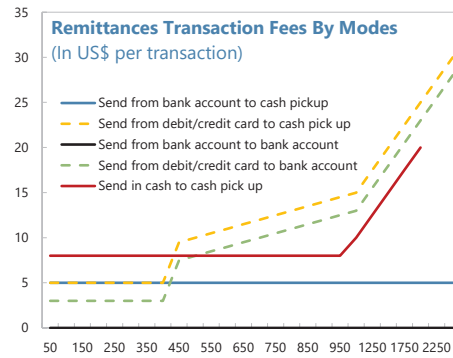
...and instantly spend them on consumption.



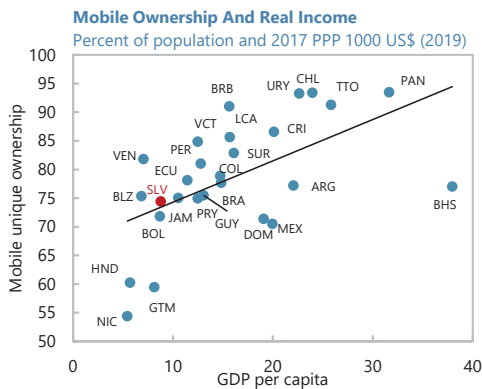
2/3 of remittances are sent and received in cash by predominantly unbanked population.



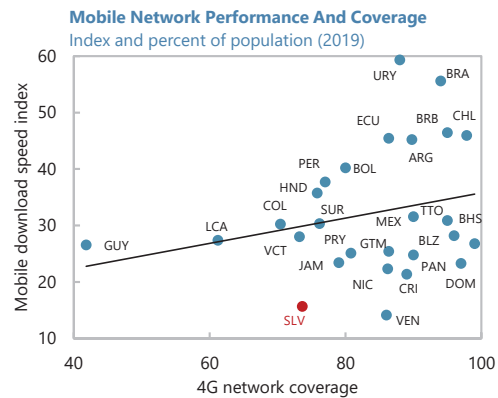
The cash-to-cash remittances for small amounts are costly, because of high KYC risks.



Mobile ownership in SLV is high in the region.



However, accessibility to digital services is limited by infrastructure and coverage bottlenecks.



Sources: IADB 2013 household survey, GSMA Mobile Connectivity Index, BCR, and IMF staff calculations.

Annex I. Increasing the Employment Contribution to Growth

1. To increase potential output in the medium term, the contribution of employment could be improved. Higher employment could be obtained through an increase in economically active population, labor force participation, and job creation. To widen economically active population base, sustained efforts are needed to continue reducing crime, and in turn diminish irregular migration. Generating formal employment is crucial to provide opportunities to young people and to support the pension system. Simplifying taxation, reducing administrative, regulatory, and financial barriers, as well as combatting corruption could incentivize firms to formalize, and generate more employment. The same conditions could also attract more FDI.

Reducing Crime

2. Homicide rates decreased significantly. Homicide rate declined from 52 per ~~100,000~~100,000 inhabitants in 2018 to 19.7 per ~~100,000~~100,000 inhabitants in 2020—a 62 percent drop. Once having the highest homicide rate in the world, El Salvador in 2020 ranked as eighth country in Latin America and the Caribbean region.^{1,2} In 2021, the homicide rate remained low.

3. Crime has high overall costs for the country.³ A recent IMF study (WP 20/02) estimates that the indirect costs of crime in El Salvador amount to 6.7 percent of GDP, consistent with a central bank (BCR) study (see table). Similarly, a 1 percent increase in output in El Salvador is associated with a decrease in crime by 2/3 percentage points. Other studies, which also include direct costs, find that the overall cost of crime in El Salvador is between 12 and 18 percent of GDP.

4. Crime, traditionally associated with gang activity, results in worse social and economic outcomes. Gangs restrict labor mobility through a system of checkpoints and tolls, forcing residents to work in their neighborhood. This impoverishes gang-controlled neighborhoods.

**Annex 1. Table 1. El-Salvador:
Estimates of the Cost of Violence**

	Year	Cost of violence (% GDP)
PNUD (2005)	2003	13.1
Acevedo (2008)	2007	12.9
USG-GOES Technical Team (2011)	2011	12.3
Peñate Guerra et al (BCR, 2016)	2014	17.7
IADB (2017)	2014	13.9
IMF WP 20/02 (only indirect)	2020	6.7

¹ Asmann, P. and E. O'Reilly. 2020 in *Crime's 2019 Homicide Round-Up*. InSight Crime, January 2020, and Asmann, P. and K. Jones. 2021 in *Crime's 2020 Homicide Round-Up*. InSight Crime, January 2021.

² There is a change in statistics methodology since July 2019. The current methodology considers only social violence, excluding deaths resulting from clashes between the police and gang members.

³ Indirect costs refer to the negative effect that crime has on economic activity and institutional quality. Direct costs include costs of prevention, of the crime itself (material losses, medical treatment of injuries, etc.), and of prosecuting criminals.

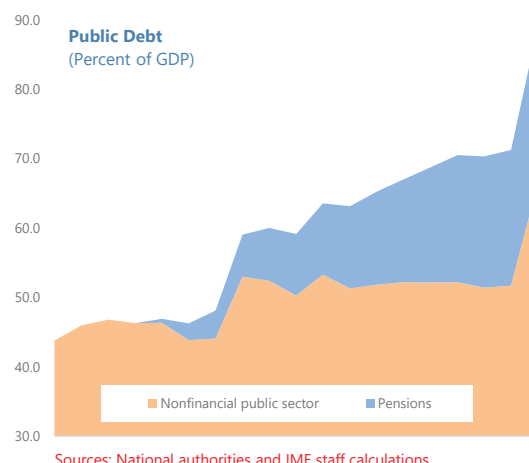
Annex II. Public Debt Sustainability Analysis

The Public Debt Sustainability Assessment indicates that debt is on an unsustainable debt path under current policies. Absent strong consolidation measures public debt is projected to be above 85 percent of GDP (including pension liabilities) at end-2021 and on an upward trajectory over the medium term. The debt stock at end-2020 was about 7 percent of GDP higher than expected at the time of the RFI disbursement (April 2020), due to a larger economic contraction, resulting in larger financing needs. These adverse changes, relying on expensive market debt due to unfavorable developments in 2020 and uncertainty of policy direction in 2021, coupled with a lack of consolidation policies, explain the current assessment compared with the assessment of sustainable with high risks provided during the RFI request. Despite the better-than-expected economic recovery this year, the authorities have continued relaxing fiscal policy, relying largely on expensive short-term debt resulting on increased rollover risks. Fiscal consolidation and structural reforms, including on governance and the fiscal sector, are essential to restore debt sustainability.

A. Background

1. Total public debt increased significantly in 2020 due to the impact of the pandemic.

This was the result of temporary spending measures implemented to mitigate the humanitarian and health crisis caused by the COVID-19 pandemic, including below-the-line operations to provide subsidized financing to companies impacted by the pandemic.¹



2. The coverage of public debt is comprehensive.

The DSA is based on the nonfinancial public sector (NFPS). Therefore, it includes general government and non-financial SOEs debt, both guaranteed and non-guaranteed. Decentralized autonomous agencies such as FOVIAL are also included. As discussed in the report—the privatization of the public pension scheme in 1998 resulted in large and increasing transfers from the budget. To cope with this problem, in 2006 a trust fund—*Fideicomiso de obligaciones previsionales (FOP)*—was created. The role of FOP is issuing securities that the AFPs are obliged to purchase (see Annex VI).² Proceeds from these bonds are then transferred to the social security administration to pay entitlements for pensioners of the old public pension system. CAPTAC-DR is helping to strengthen the quality of debt statistics (see Box).

¹ A trust fund (FIREMPRESA) was created to support SMEs and informal business. As of February 22nd, US\$237 million from a total of US\$600 million has been disbursed to firms, which in addition to the overall deficit, has increased nonfinancial public sector debt in 2020.

² FOP issues two types of securities (*Certificados de inversión previsional-CIP*), CIP-A and CIP-B. See Annex VI for details on each of these securities.

from the Salvadoran diaspora living in the US. Following a sizable rebound in GDP growth in 2021, slow convergence towards potential is projected starting in 2022. After the implementation of certain tax measures—some of them administrative—and a sizeable curb in the resources transferred to local governments—already approved by Congress—a small NFPS primary surplus is expected. It, however, **be is** insufficient to compensate for large and increasing interest payments resulting from the lack of a comprehensive fiscal adjustment. Fiscal projections include about 1 percent of GDP in measures—compared with 4 percent of GDP proposed by staff. Gains/costs from the pension reform are not included as the authorities have not yet made public their reform proposal. To close the financing, the scenario assumed that external financing would be obtained at current spreads. As a result, interest payments are expected to remain high amid high gross financing needs and an expected tightening of global financial conditions by the end of the projection period.

C. Analysis

7. Under current policies, the debt dynamics are highly unfavorable. After an initial decline expected in 2021 and explained entirely by the strong rebound in nominal GDP, the debt-to-GDP ratio is projected to increase until it reaches about 96 percent of GDP by the end of the projection period. This increase is driven by a primary deficit well above the debt-stabilizing primary balance. Gross financing needs would peak at 20 percent of GDP in 2025—well above the 15-percent threshold for emerging economies—and remain elevated due to regular biannual repayments of Eurobonds starting in January 2023.

8. Risks remain elevated. The heat map analysis indicates heightened risks given that debt exceeds the debt distress threshold of 70 percent of GDP in 2020 and is projected to stay above that level for the forecast horizon. Compared to the DSA prepared at the time of the RFI request (April 2020), the change in the stock of short-term debt now signals a risk (red signal), as the government has increased considerably the use of short-term debt. The macro-fiscal stress tests highlight risks stemming from adverse GDP shocks that would end with debt-to-GDP ratios above 96 percent. Gross financing needs, however, would breach the benchmark of 15 percent of GDP only under the adverse GDP shock.

tranche (25 percent of total bank reserves) at no cost, (ii) the second tranche (25 percent) at LIBOR plus a penalty, and the third (50 percent), at no cost but subject to the approval by the Superintendence of Financial System (SSF), by submitting a regularization plan.

3. In addition, the central bank can provide bilateral emergency liquidity assistance to a solvent bank that has exhausted traditional facilities. When normal market functioning is disrupted, and a solvent bank's first and second tranche reserves are accessed, the central bank can provide emergency liquidity up to 100 percent value of the required capital of an individual bank under stress. The authorized ELA tools are: (i) repurchase agreements using appropriate capital, (ii) temporal acquisition of banks' investments portfolio, and (iii) liquidity credits to banks.

4. The gradual restoration of banks statutory reserves—15 percent of liabilities by June 2022—is adequate but vulnerabilities raised by potential liquidity shocks remain. While banks have excess reserves and strong external asset positions, the potential large liquidity shocks could come from deposits withdrawal or a sudden drop in the rollover of banks short-term debt (similar to 2008-09 episode). Authorities would face significant constraints in dealing with a run on the banking system given limited international reserves and the restrictions associated to a fully dollarized economy. The Salvadoran emergency liquidity framework is vulnerable to liquidity risks due to (i) absence of additional layers of liquidity buffers, for example the lack of a liquidity fund as it is in Ecuador;² (ii) delays in finalizing and approving the bank resolution law and framework; (iii) incomplete funding of deposit insurance fund, with a remaining two thirds expected to be filled;³ and (iv) absence of sufficient foreign reserves to be injected into banks in times of stress. Against this backdrop, the adequate reserve requirements level should be continuously reevaluated.

5. The authorities should strengthen the bilateral ELA framework and continue working towards a harmonized risk-based liquidity management framework. Increasing the capital of the central bank (BCR) (by removing central bank ownership of quasi-fiscal activities⁴) would allow for an augmentation of the ELA contingent credit line, as the central bank can borrow more than the currently possible US\$200 million, against its higher capital. Advancing on the banking resolution legal framework, including strengthening the deposit insurance fund, would reduce liquidity vulnerabilities. In the medium-term, some elements of the current system of prudential reserve requirements could be retained in the forward-looking liquidity risk-management framework of Basel III. To facilitate the transition process, the authorities could improve their communication tools, including by incorporating stress-tests in the financial stability reports and introduce early-warning system indicators.

² A liquidity fund is not needed in Basel III. However, at the moment, banks do not have incentives in pooling liquidity resources, since the largest banks have plenty liquidity, as they comply with Basel III.

³ The underfunded scheme of deposit insurance fund may provide less reassurance to depositors.

⁴ One of the main safeguard assessment recommendations was for BCR to exit from all quasi-fiscal activities—including participation in the state development bank and trust funds—to strengthen its governance and transparency. To be able to implement this recommendation, the government would need to pay for the central bank stakes in these institutions, about US\$400 million. This is in addition to the agreement with the government of recapitalization BCR needed to transition to IFRS, a safeguards assessment recommendation which is not progressing as expected.

Table 1. El-Salvador: Selected Economic and Social Indicators**I. Social Indicators**

Per capita income (U.S. dollars, 2020)	3,799	Population (million, 2020)	6.5	6.3
Percent of pop. below poverty line (2020)	26	Gini index (2019)	39	35

II. Economic Indicators (percent of GDP, unless otherwise indicated)

	2016	2017	2018	2019	2020	Proj.	
						2021	2022
Income and Prices							
Real GDP growth (percent)	2.5	2.2	2.4	2.6	-7.9	10.0	3.2
Consumer price inflation (average, percent)	0.6	1.0	1.1	0.1	-0.4	3.5	2.8
Terms of trade, percent change	6.1	-4.3	-3.9	0.8	6.0	-5.4	3.4
External sovereign bond spread (basis points)	599	520	424	453	760	837	...
Money and Credit							
Credit to the private sector	51.2	52.2	53.5	55.3	62.1	57.6	56.3
Broad money	50.0	53.8	54.8	59.0	70.2	65.7	65.1
Interest rate (time deposits, percent)	4.4	4.4	4.2	4.3	4.1	3.9	...
External Sector							
Current account balance	-2.3	-1.9	-3.3	-0.6	0.5	-3.9	-2.5
Trade balance	-19.2	-19.4	-21.7	-21.2	-21.1	-28.7	-28.4
Transfers (net)	18.8	20.2	20.6	21.0	24.2	26.1	26.5
Foreign direct investment	-1.4	-3.6	-3.2	-2.4	-0.8	-2.8	-1.9
Gross international reserves (millions of U.S. dollars)	3,238	3,567	3,569	4,446	3,083	3,510	3,980
Nonfinancial Public Sector							
Overall balance	-3.1	-2.5	-2.7	-3.1	-8.2	-5.8	-4.9
Primary balance	-0.2	0.7	0.9	0.6	-3.8	-1.1	0.0
<i>Of which:</i> tax revenue	17.2	17.6	18.0	17.7	18.5	20.4	20.9
Public sector debt 1/	68.8	70.5	70.4	71.3	89.2	84.4	84.8
National Savings and Investment							
Gross domestic investment	16.0	16.7	18.4	16.9	17.9	18.5	17.7
Private sector 2/	13.5	14.1	15.7	14.2	15.7	15.8	14.5
National savings	13.7	14.8	15.1	16.3	18.4	14.5	15.2
Private sector	13.7	14.7	14.7	16.4	24.0	17.3	16.4
Net Foreign Assets of the Financial System							
Millions of U.S. dollars	1,995	2,645	2,714	3,424	3,046	3,303	3,836
Memorandum Items							
Nominal GDP (billions of U.S. dollars)	24.2	25.0	26.0	26.9	24.6	27.9	29.4

Sources: Central Reserve Bank of El Salvador, Ministry of Finance, and IMF staff estimates.

1/ Includes gross debt of the nonfinancial public sector (including pension liabilities) and external debt of the central bank.

2/ Includes inventories.