

# UNDP LAC C19 PDS Nº. 23 Do we Need to Rethink Debt Policy in Latam?

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# Abstract

The COVID-19 shock raised concerns about debt sustainability both globally and in Latin America and has motivated a number of policy recommendations: debt standstills, issuing contingent debt or debt repurchases among others. In this paper we argue that debt sustainability was not a problem in the region coming into the crisis and, more surprisingly, will not be an issue when coming out of it, a result that is consistent with the fact that markets have remained mostly open. We then review recent proposals and conclude that, while subject to improvements, the current contractual environment for sovereign debt appears able to deal with the uncertainties posed by the shock. In fact, we describe the recent restructurings of Argentina and Ecuador to show that large debt restructurings can successfully be implemented within the current framework, though we also find that the economic costs of such restructurings exceeded benefits, particularly in the case of Argentina.

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<sup>\*</sup>The cases include Argentina in 2001, Ecuador in 2001 and 2008, Uruguay in 2001, Dominican Republic in 2005, Belize in 2006 and 2012, Jamaica in 2010 and 2013, St Kitts and Nevis in 2011 and Grenada in 2004. See Sturzenegger and Zettelmeyer (2006) for the first four cases, and IMF (2013) Jahan (2013), Das *et al.* (2012) for the other 6 cases. See Feibelman (2017) for Ecuador's 2008 restructuring.



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Do we Need to Rethink Debt Policy in Latam? By Federico Sturzenegger



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# Introduction to the series: Evidence, Experience, and Pertinence in Search for Effective Policy Alternatives

The COVID-19 pandemic is one of the most serious challenges the world has faced in recent times. The total cost in terms of human lives is yet to unfold. Alongside the cost of lives and deep health crisis, the world is witnessing an economic downfold that will severely impact the wellbeing of large parts of the population in the years to come. Some of the measures that are currently being used to counteract the pandemic may impact our future lives in non-trivial ways. Understanding the association between different elements of the problem to broaden the policy space, with full awareness of the economic and social effects that they may bring, is the purpose of this series.

Thus far, the impossibility of targeted isolation of infected individuals and groups has led to policies of social distancing that impose a disproportionately high economic and social cost around the world. The combination of policies such as social distancing, lockdowns, and guarantines, imply a slowdown or even a complete stop in production and consumption activities for an uncertain period of time, crashing markets and potentially leading to the closure of businesses, sending millions of workers home. Labor, a key factor of production, has been quarantined in most sectors in the economy, borders have been closed and global value chains have been disrupted. Most estimates show a contraction of the level of output globally. For the Latin America and Caribbean region, the consensus forecasts are at -3 to -4%, and it is not until 2022 that the region is expected to go back to its pre-crisis output levels in scenarios that foresee a U-shaped crisis pattern. According to ECLAC, more than 30 million people could fall into poverty in the absence of active policies to protect or substitute income flows to vulnerable groups.

We face a crisis that requires unconventional responses. We are concerned about the level-effect: the impact of the crisis on the size of the economies and their capacity to recover growth after the shock. But we are equally concerned about the distributional impact of the shock. The crisis interacts with pre-existing heterogeneity in asset holdings, income-generation capacity, labor conditions, access to public services, and many other aspects that make some individuals and households particularly vulnerable to an economic freeze of this kind. People in the informal markets, small and micro entrepreneurs, women in precarious employment conditions, historically excluded groups, such as indigenous and afro-descendants, must be at the center of the policy response.

UNDP, as the development agency of the United Nations, has a long tradition of accompanying policymaking in its design, implementation, monitoring and evaluation. It has a mandate to respond to changing circumstances, deploying its assets to support our member states in their pursuit of integrated solutions to complex problems. This series aims at drawing from UNDPs own experience and knowledge globally and from the expertise and capacity of our partner think tanks and academic institutions in Latin America and the Caribbean. It is an attempt to promote a collective reflection on the response to the COVID-19 health crisis and its economic and social effects on our societies. Timeliness is a must. Solutions that rely on evidence, experience, and reasoned policy intuition -coming from our rich history of policy engagement- are essential to guide this effort. This series also contributes to the integrated approach established by the UN reform and aspires to become an important input into the coherent response of the United Nations development system at the global, regional, and national levels.

Ben Bernanke, former Governor of the US Federal Reserve, reminds us in his book *The Courage to Act* that during crises, people are distinguished by those who act and those who fear to act. We hope this policy documents series will contribute to the public debate by providing timely and technically solid proposals to support the many who are taking decisive actions to protect the most vulnerable in our region.

#### Luis F. Lopez-Calva

United Nations Development Programme Regional Director, Latin America and the Caribbean New York, March 2020



# 1. Introduction

Since its birth 30 years ago with the Brady bonds, the asset class of sovereign debt has gained over time in volume, liquidity and predictability. Decade after decade it has become a reliable and increasing source of financing. Latin American has been part of this trend as shown by the growth in the level of government debt as % of GDP over the last ten years (Figure 1).

While it is true that the region has been prolific in episodes of debt distress in recent years, for example in Argentina, Ecuador, Uruguay and a few Caribbean countries, these episodes, rather than making countries and markets shy away from sovereign debt, only seem to have helped to make the asset class stronger.<sup>1</sup> Just to give one example, the Argentine default of 2001 prompted the inclusion of collective action clauses in new bonds issues. These clauses, by forcing a restructuring on all bondholders when a sufficiently large number agrees to the restructuring helped provide the flexibility to implement corrections when needed later on. The cases of Ecuador and Argentina that we discuss below being two recent examples.

Needless to say, sovereign debt has not been uncontroversial having both supporters and detractors. Supporters argue three main advantages of sovereign debt. First, that it provides the resources for development, freeing the country from the constraints of domestic savings. Norway, for example, is mentioned as a country that managed to mobilize its natural resource wealth by tapping foreign savings accelerating its path to becoming one of the richest countries in the world. Second, that it allows to anticipate future consumption when you know future income will grow as would be the case of Guyana today. Third, that it provides a way for smoothing transitory shocks as for example in Caribbean countries when subject to the devastating effect of hurricanes. The COVID-19 crisis appears to be an event where sovereign debt can be a useful tool to smooth the effects of what is believed will be a relatively transitory shock.



**Figure 1.** Debt as % of GDP (Latam)

# The detractors mostly focus on one very strong point: that it has been shown that debt tends to be procyclical, meaning that debt may not be used to smooth transitory negative shocks but may be instead the vehicle for pursuing

<sup>&</sup>lt;sup>1</sup> The cases include Argentina in 2001, Ecuador in 2001 and 2008, Uruguay in 2001, Dominican Republic in 2005, Belize in 2006 and 2012, Jamaica in 2010 and 2013, St. Kitts and Nevis in 2011 and Grenada in 2004. See Sturzenegger and Zettelmeyer (2006) for the first four cases, and IMF (2013) Jahan (2013), Das *et al.* (2012) for the other 6 cases. See Feibelman (2017) for Ecuador's 2008 restructuring.



a short term agenda, probably the government's.<sup>2</sup> In this view governments use sovereign debt when they can to put countries on an unsustainable long term path for the benefit of a short term gain, the trademark of populism.

The procyclicality of the debt, it is argued, is fostered, maybe even encouraged, by the markets themselves that open up when countries do well, and repayment seems secure and quickly retrench at the first sign of trouble. According to this criticism, at the end of the day sovereign debt actually unsmoothes consumption, the opposite of what it was supposed to do.

Markets have also been questioned in their ability to discipline debtors. The interventions of multilaterals in the form of occasional bailouts further weakened the disciplining role of markets. Why evaluate risk if protection is always close at hand?<sup>3</sup> To make things worse, after a default, no matter how harsh, new forward-looking unbruised investors always appear willing to come along. In fact, exclusion times after episodes of debt distress have shortened systematically over recent years.<sup>4</sup> Thus there is consensus today that markets will function better when forcing private sector haircuts in scenarios of debt distress, something that has been known for some time now as "private sector involvement".

It is not surprising then that the COVID-19 outbreak has led to a revival of this debate. The sharp output declines, together with the need to increase outlays to deal with the pandemia, have led countries to pile up a new layer of debt in a way that may jeopardize their future prospects. Initially capital flows retrenched, and several prominent economists predicted a tightening of market conditions over the immediate future, a tightening which in turn could trigger a new, possibly massive, wave of debt defaults. The beginning of the year saw calls for urgent action both in terms of debt standstills or, even more radically, debt restructurings ahead of an impending crisis.

#### Angel Gurria, Secretary General of the OECD put it bluntly<sup>5</sup>:

"Latin America already had a lot of debt before the crisis, ... after the brutal reality" left by the virus the region would need much greater resources and/or relief on its debt."

#### Jeffrey Sachs, Professor at Columbia University warned that<sup>6</sup>:

*"If handled with care, this year's debt-service payments can and should be recapitalized at low interest rates to avoid a financial pile-up. If not, 2020 will mark a devastating new episode of global financial crisis."* 

Today, several months into the COVID-19 crisis, I think we are clear to say that a drying up of the market for sovereign debt, not only did not occur, but, on the contrary, that financing has remained ample and available. As shown in Figure 2, flows have returned after an initial sharp retrenchment, offering financing conditions that have turned better than ever before. Throughout 2020 in the region Colombia and Brazil placed debt at a 3% interest rate, Honduras and El Salvador at around 5%, among others.

<sup>&</sup>lt;sup>2</sup> See Panizza et al. (2020) and references there.

<sup>&</sup>lt;sup>3</sup> There is an extensive literature on the role of bailouts that blossomed after the bailouts of the Asian Crisis of 1997, leading to a fundamental change in the role of multilateral institutions. Initially multilaterals, particularly the IMF, viewed their role as one of precluding capital flow disruptions; but this objective mutated with time to that of organizing the way in which the private sector would also provide debt relief ("private sector involvement") in an equitable way between private and official creditors when crises struck. This view matured in the run up to the Russian default of 1998 and eventually feeds the idea that the private sector needs to share in the costs of debt disruption, a view that is today universally accepted.

<sup>&</sup>lt;sup>4</sup> See Panizza et al. (2020), Gelos et al. (2011) Richmond and Dias (2008).

<sup>&</sup>lt;sup>5</sup> See <u>www.ft.com/content/a86e0382-8f63-4f4f-839c-51c5a9ccc9e5</u>.

<sup>&</sup>lt;sup>6</sup> Sachs (2020).





# 5,0 2,5 0,0 -2,5 -5,0 -7,5 -10,0 -12,5 -15,0 -17,5 -20,0 Source: EPFR Global

### Figure 2. Capital Flows to Emerging Markets

But this short run availability does not mean that a problem may not be brewing. That nothing has happened this year does not mean that there will not be a problem ahead. Furthermore, it could be argued, along Jeffrey Sach's line that the problem is getting worse and that the recent availability of funds should be interpreted as another chapter of irresponsible market lending, thus strengthening not weakening the call for action.

The recent experiences of Ecuador and Argentina could provide some support to the point. Both countries managed to attain a voluntary agreement with creditors providing substantial debt relief. Participation in these two exchanges reached percentages in the upper 90s implying that collective action clauses were met, thus blocking holdouts. If the market understood that a debt relief was needed in these cases, why not argue the same for the other cases? Of course, to make this argument we would need to argue that these restructurings will not lead to long term costs. But the amount of debt relief and the participation rates both look impressive and vindictive of the "do something" approach.

More to the point, Figure 3 shows the primary surpluses that would be required if markets for sovereign debt close. The graph shows in the vertical axis the primary surpluses that will be needed to pay for interest coming due after 2021.<sup>7</sup> The horizontal axis shows the primary result in 2019. A number above the 45 degree line means that a fiscal adjustment (relative to 2019) would be called for, a situation that virtually applies to all countries. In fact, if markets close, the average adjustment required will be 3,3% of GDP but with a range that goes all the way to an impossible 16,9% of GDP for Suriname or 8,1% for Costa Rica and Dominica.

<sup>7</sup> To compute this number we add the expected fiscal deficits of 2020 and 2021 to the 2019 debt levels and multiply it by the implicit interest rate of debt of 2022 with all data taken from the 2020 October WEO.







#### Figure 3. Primary Surpluses Required in a Distress Scenario

This note attempts to think about the question of whether action in the debt front is called for, or whether current institutions have the flexibility and capacity to deal with current and future upheavals and should be left to work things out on their own terms.

To address this question we first analyze the debt sustainability situation of countries going into the crisis. We find below that, taken as a whole, the region did not seem to be, prior to the crisis, in an unsustainable path. We then update this exercise assuming what is expected to happen to debts and output as a result of the COVID pandemia. Surprisingly, we will show that we don't find that the situation deteriorates significantly, in other words that, with some exceptions, debt sustainability will not to be a concern upon exiting the COVID crisis either. We spend some time in checking the robustness of this result to different assumptions.

Even if we conclude that no impending crisis is looming in the horizon, is this enough to discard the notion that action should not be taken? Not necessarily. We first review the recent restructurings of Argentina and Ecuador, trying to assess costs and benefits. The aim is to provide some guidance on whether they could be an example to be emulated. We show that current bond covenants are relatively well prepared to execute such corrections, but when we dwell into the cost-benefit of the debt restructuring we argue that the costs of the restructuring on private sector wealth may actually dwarf the savings obtained on public debt.

With the ammunition of these analyses in the final section we discuss some of the policy recommendations that have been put forward over recent months and provide a few of our own. We briefly discuss the role of official lending, standstill, contingent debt, debt buybacks and debt maturities.

Our final conclusion is that while always subject to permanent improvements, the current framework has worked relatively well and should not be uprooted.



# 2. Debt Sustainability Coming into COVID-19

Let's start our debt sustainability exercise doing a simple computation summarized in figures 4 and 5.



This exercise computes sustainability pre-COVID. In the graph we compare 2019 primary surpluses with the required primary surpluses that would have made the debt sustainable according to expectations then. Countries below the 45 degree line are in the "sustainable" region (primary surpluses larger than those required), while those that are above are in the "unsustainable" region. Required primary surpluses are computed through the well known equation

$$ps^r = d \frac{(r-g)}{1+g}$$

where  $ps^r$  is the required primary surplus, r is the average interest rate, g the expected growth rate of the economy, expressed in the same currency as r, d is the debt to GDP ratio.

The intuition for this equation is straightforward. If the interest rate is larger than the growth rate then you need a primary surplus to pay at least part of the debt. Otherwise debt would grow faster than GDP increasing the debt-to-GDP ratio eventually making debt unsustainable. If, on the contrary, growth is bigger than the interest rate, then the country can afford a primary deficit. If the growth rate and the interest rate are equal, the required primary surplus is zero, debt grows at the rate of growth of the economy and the debt to GDP ratio remains stable. In this way, the interplay of the growth of the economy and the interest rates becomes a first reference point for debt sustainability.

In order to make the estimations comparable we will do away with specific idiosyncrasies, so the computation will be done using comparable WEO data. g will be computed under two assumptions. One uses the expected growth in nominal dollar GDP for the period 2020-2024 as presented in the October 2019 version of the WEO (Figure 4); the other uses the average real growth rate for each economy for the period 2000-2019, adding 2% to account for US inflation (Figure 5). r is estimated as the ratio between interest payments and debt for 2019 (an estimation using an average for recent years does not modify the results that much, so we omit it for brevity)<sup>8</sup>. Debt is the debt to GDP ratio as presented by the WEO.

<sup>&</sup>lt;sup>8</sup> This estimation overestimates the interest rate cost to the extent that domestic denominated debt includes an inflation component. This bias actually strengthens the results presented below.



Needless to say, this analysis is very coarse. It just identifies if the primary surplus is sufficient to stabilize the debt to GDP ratio. When it does not, it does not mean that the debt is not sustainable, it just means that a fiscal adjustment is needed going forward.

### Cochrane (2020) puts it nicely:

"We agree that there is some upper limit on the debt to GDP ratio, and that a rollover crisis becomes more likely the larger the debt to GDP ratio. Given that fact, over the next 20-30 years and more, the size of debt to GDP and the likelihood of a debt crisis is going to be far more influenced by fiscal policy than by r-g dynamics.

I especially like this view because it doesn't make sense that an interest rate 0.1% above the growth rate vs. an interest rate 0.1% below the growth rate should make a dramatic difference to the economy."

So, the results should be taken as indicative of whether large fiscal adjustments are needed or not. We should worry about sustainability only if the required adjustments appear to be politically unfeasible.

The computation is subject to a number of limitations. Current interest rates may not reflect interest costs in the future, and future growth may be faster or slower than past growth. Current fiscal results may not be the ones to look at because they may diverge from their long run equilibrium. For example, we don't even consider the fiscal results of 2020 or 2021 in this computation, but rather compare the needed fiscal results with those of 2019, the last "normal" year.

Figure 4 computed with the growth rate predicted for the following 4 years at the end of 2019 shows that most countries are reasonably close to the 45 degree line, that is, in the sustainable region, in fact the average required adjustment is zero. From the 32 countries in the sample, only 10 require an adjustment larger than 1% of GDP, only 7 one larger than 2% of GDP and only 1 one larger than 4%.

The general picture does not change significantly when using the average growth rate of the last 20 years (plus a 2% annual rate to account for US inflation) in Figure 5. The average adjustment is again zero, and only 9 require an adjustment larger than 1% of GDP, only 5 one larger than 2% of GDP and only 2 one larger than 4%.

The take away from this first exercise is that coming into the crisis we could not say that Latin American countries faced an impending debt crisis. This may explain why markets were buoyant at the time.

# 3. Was Debt Sustainability Affected by the 2020 Crisis?

The COVID crisis had two obvious effects on debt sustainability. On the one hand it decreased output, increasing debt burdens; on the other hand, deficits are going to be unusually large in 2020 and 2021, increasing debt. To make matters worse, some countries have seen their credit ratings deteriorate, increasing interest costs. Thus, the starting point for a debt analysis at the end of 2021 by definition has to be worse.

Figure 6 shows the impact of COVID on output by comparing output forecasts for both 2020 and 2021 as they stood at the end of 2019 relative to where they are today.<sup>9</sup>

<sup>9</sup> To be precise this graph computes the change in the cumulative 20–21 growth rate in WEO's October 2019 and October 2020 reports.





### Figure 6. A Downward Change in Expected Growth

The Figure shows that COVID-19 has implied a drastic shock in income, and, while everybody agrees it has a large transitory component, there is still a significant discussion on what the persistence of the shock may be. Reasons for persistence include, in addition to the uncertainty of the outbreak itself, primarily the destruction of firm capital during the transition, the secular decline in the demand for certain activities that will require reallocation, and damage in the accumulation of human capital.<sup>10</sup> On the other hand savings rates have dramatically increased, fostering capital accumulation, while productivity may also increase going forward as digitalization allows for a quicker absorption of technological change. The complexity of the channels implies that this is a debate that is open today.

Figures 7 and 8 update the exercise of figures 4 and 5 by taking into consideration these effects. The two graphs now focus on 2022 so the level of debt to GDP is computed assuming the expected output performance in 2020 and 2021 and the expected deficit buildup during those two years, with all data taken from the October 2020 WEO. With these assumptions, Figure 7 assumes that real borrowing costs return to 2019 levels and that trend growth goes back to its historical value, while Figure 8 also assumes trend growth is also its historical value, but uses as interest cost that which is expected for 2022, thus internalizing any increase in the cost of debt that may have materialized during this period.

Relative to the fiscal results in 2019, Figure 7 suggests the need of an average adjustment -0.1% of GDP with 8 countries requiring an adjustment larger than 1% of GDP, 6 one larger than 2% of GDP and 2 require an adjustment larger than 4%. Figure 8 shows the need of an average adjustment of -0,2% of GDP with 6 countries requiring an adjustment larger than 1% of GDP, with 5 one larger than 2% of GDP and 2 require an adjustment larger than 4%.

Why is this number actually lower than the one we found in 2019 in spite of the higher debt to GDP levels? Because the primary deficit that keeps the debt to GDP ratio stable increases with the debt level when the growth rate is higher than the interest rate. But even if we restrict to the countries where the interest rate is higher than the growth rate and need to have a primary surplus, the change in the required primary surplus is just 0.2% if the interest costs

10 See F. Buera et al. (2020) for a list of these arguments, and IDB (2020) and González et al. (2020) for a discussion on human capital.



remain as in 2019. In fact, if the interest costs are those of 2022, they need a smaller primary surplus of 0.4% of GDP. So rather than increasing the cost of debt actually decreased. This provides extra room for sustainability.



While the differences in required primary surplus may not be that large when comparing before and after COVID-19, it may very well be true that these results are today less attainable given the fiscal results of 2020 and 2021 which showed large a deterioration across the whole region. So, how far away are these results from where we expect to be at the end of 2021? Table 1 discusses this by showing the primary results, realized or predicted, for 2019-2021, and the required primary result in 2022 that would make debt sustainable. The question we want to address is how far away are the primary fiscal results required in 2022 both from those expected for 2021 and the historical primary surpluses attained in each country. The "Additional Adjustment" column in Table 1 shows the extra amount of fiscal correction that will have to be implemented after 2021. The average required improvement is 1,6%, with only four countries requiring an adjustment larger or equal to 4% after 2021. Again, the numbers do not suggest a situation that is unmanageable. The last column shows the needed adjustment relative to historical values. Figures 9 and 10 show these required adjustments in a histogram.

	2019	2020 (p)	2021 (p)	2022 (required primary deficit)	Additional adjustment	Historical primary surplus (2005-2018)	Adjustment to Historical primary surplus
Antigua and Barbuda	-1.2%	-9.3%	-2.1%	-1.6%	0.5%	-1.3%	-0.3%
Argentina	-0.4%	-8.5%	-4.5%	-0.8%	3.7%	-0.9%	0.2%
Aruba	4.8%	-18.4%	-0.5%	2.9%	3.4%	-0.3%	3.2%
Barbados	6.3%	1.0%	3.5%	1.5%	-2.0%	-0.3%	1.8%
Belize	-0.5%	-5.6%	-4.2%	-3.3%	0.9%	1.1%	-4.4%
Bolivia	-5.8%	-7.0%	-5.4%	-2.6%	2.9%	0.0%	-2.6%
Brazil	-1.0%	-12.0%	-3.1%	-0.9%	2.1%	1.1%	-2.0%
Chile	-2.3%	-8.1%	-3.7%	-1.8%	1.8%	0.9%	-2.7%
Colombia	0.0%	-6.2%	-2.9%	-0.7%	2.1%	0.6%	-1.3%
Costa Rica	-2.8%	-4.2%	-2.0%	1.0%	3.0%	-1.0%	2.0%
Dominica	-6.4%	-1.5%	1.5%	-1.0%	-2.5%	1.8%	-2.9%

#### Table 1. Additional (primary) Fiscal Effort Required



Dominican	0.6%	4 604	0.204	1 204	1 504	0.5%	0.8%
Republic	0.0%	-4.0%	0.2%	-1.3%	-1.3%	-0.3%	-0.070
Ecuador	-0.5%	-5.8%	-1.3%	-1.7%	-0.4%	-0.7%	-1.0%
El Salvador	0.6%	-8.8%	-3.5%	1.2%	4.8%	-0.9%	2.1%
Grenada	6.8%	0.5%	3.6%	-1.1%	-4.6%	-0.3%	-0.8%
Guatemala	-0.6%	-3.8%	-1.9%	0.2%	2.0%	-0.5%	0.7%
Guyana	-1.8%	-5.2%	-2.1%	-1.2%	0.9%	-2.8%	1.7%
Haiti	-1.8%	-5.6%	-4.3%	-1.2%	3.0%	-2.3%	1.1%
Honduras	0.8%	-2.5%	-1.7%	-2.1%	-0.4%	-2.0%	-0.1%
Jamaica	7.1%	3.5%	5.4%	3.4%	-2.0%	6.7%	-3.3%
Mexico	1.3%	-2.0%	0.2%	0.6%	0.4%	0.2%	0.5%
Nicaragua	0.8%	-3.0%	-2.1%	-1.6%	0.5%	0.0%	-1.6%
Panama	-1.5%	-6.8%	-4.9%	-2.3%	2.6%	0.9%	-3.2%
Paraguay	-2.6%	-6.3%	-3.2%	-0.3%	2.9%	0.8%	-1.1%
Peru	-0.2%	-7.9%	-2.6%	-0.9%	1.7%	1.3%	-2.2%
St. Kitts and Nevis	0.2%	-7.6%	-4.7%	-1.2%	3.5%	6.2%	-7.4%
St. Lucia	-0.5%	-7.9%	-2.4%	0.0%	2.4%	-0.8%	0.8%
St. Vincent and the Grenadines	-0.4%	-4.9%	-4.0%	-1.2%	2.8%	-0.7%	-0.5%
Suriname	-6.5%	-7.4%	-1.4%	3.6%	4.9%	-0.8%	4.4%
The Bahamas	0.8%	-3.3%	-6.6%	1.1%	7.7%	-1.5%	2.5%
Trinidad and Tobago	-1.3%	-11.1%	-4.2%	-0.1%	4.1%	-0.4%	0.3%
Uruguay	-0.6%	-2.9%	-1.2%	-0.4%	0.8%	1.3%	-1.7%

Note: 2019 data are from WEO October 2019, while 2020 and 2021 data are from WEO October 2020. We calculate the financial deficit required to stabilize the debt to GDP ratio using the formula (1) for the primary surplus and adding interest payments at the implicit rate of 2022 to the new stock of debt.





# • Figure 10. Fiscal Effort Required vs Historical Primary Surplus







### Figure 11. Latam Debt-GDP Ratios According to WEO



Figures 9 and 10 allow two main conclusions. The first is that given the deterioration of fiscal results in 2020 and 2021 there is still a road ahead in terms of fiscal convergence, the average correction needed in 2022 is 1.6% and 1.7% when weighted by GDP, which is not small. But Figure 10 shows that relative to historical primary balances, the required adjustment is not that large in fact on average the adjustment required is -0.6% and -1% when GDP weighted.

We argued above that countries did not face an imminent debt crisis coming into the crisis. The different exercises done in this section allows us to conclude that neither will they do coming out of it.

One explanation for this somewhat surprising result is that in spite of debt downgrades, the crisis of 2020/2021 has come together with a period of unusually low interest rates. In fact, average implicit rates which were 4.2% in 2019 for the region, actually fall to 3.9% by 2022 (4% if Ecuador and Argentina are excluded). These low interest rates have helped maintain sustainability in spite of the increase in debt ratios. Another reason is that fiscal prudence over the years have allowed countries to build the fiscal space to absorb the jump in the debt level without stressing fiscal sustainability.

Obviously our analysis is simple and conventional, and we have focused on the general results for the region. Our conclusions depend on a number of assumptions on which there is much uncertainty. Will low interest rates persist? What if market close requiring a more than 3% fiscal adjustment as mentioned in the introduction? What if the fiscal effort in 2022, already significant relative to what is expected in 2021, is stressed by a second COVID wave which weakens economies into the future?

One way to check the robustness of our conclusion is computing how much extra fiscal effort would be required if interest rates turn out higher or growth lower. This extra fiscal effort can be measured against 2019 fiscal results, relative to historical primary surpluses or relative to the expected primary surpluses for 2021.

Table 2 shows the results using as a baseline the historical growth performance for each country, and the financial costs for 2022. The table shows the required fiscal effort in each scenario (the baseline is the number in the upper left quadrant). When comparing with fiscal results in 2021, a deterioration in interest rates or growth rates of 2%, brings the required adjustment from 1.6% to 3.1% of GDP. Relative to 2019's primary surplus the required effort moves from



-0.2% to 1.3%, and relative to historical primary results from -0.6% to 0.9%. While a deterioration of the situation will require a bigger effort, the range of scenarios remains within reach, particularly relative to historical values or normal times.

### Table 2. Robustness Check

Average Adjustment relative to primary balance 2021						
GDP growth/interest rate	*	+1%	+2%			
*	1.6%	2.3%	3.1%			
-1%	2.4%	3.1%	3.8%			
-2%	3.1%	3.8%	4.6%			
Average Adjustment relative to primary balance (2019)						
GDP growth/interest rate	*	+1%	+2%			
*	-0.2%	0.6%	1.3%			
-1%	0.6%	1.3%	2.0%			
-2%	1.3%	3.8%	3.0%			
Average Adjustment relative to historic primary balance (2005-2018)						
GDP growth/interest rate	*	+1%	+2%			
*	-0.6%	0.1%	0.9%			
-1%	0.1%	0.9%	1.6%			
-2% 0.9%		3.8%	2.3%			

Two additional pieces of information provide more robustness to our conclusion. First that the debt projections of WEO itself show that with few exceptions debt to GDP ratios appear to stabilize in the region. (Figure 11). Second that financing has remained available. In fact, over the year several countries have managed new debt issues. Table 3 shows some recent issues.

### Table 3. Recent Debt Issues in Latam

Country	Date of bond offer	Amount of issuance (US\$B)	Coupon rate (%)	Maturity Rate
Panama	03/26/2020	2.5	4,5	04/01/2056
Peru	04/16/2020	1	2.39	01/23/2026
	04/16/2020	2	2.78	01/23/2031
Guatemala	04/21/2020	0.5	5.38	04/24/2032
	04/21/2020	0.7	6.13	06/01/2050
		1	3,9	04/27/2025
Mexico	04/22/2020	2.5	4.75	04/27/2032
		2.5	5	04/27/2051
Paraguay	04/23/2020	1	4.95	04/29/2031
Chile	05/05/2020	1.46	2.45	01/31/2031
Colombia	06/01/2020	1	3.13	04/15/2031
Colombia	06/01/2020	1.5	4.13	05/15/2051
Duesti	06/02/2020	1.25	2.88	06/06/2025
Brazii	00/03/2020	2.25	3.88	06/12/2030



While the latter is not a proof of sustainability, it appears there is no generalized concern on the ability of countries to pay their debts. This is consistent with the view that a debt crisis is not looming in the horizon.

# 4. The Restructuring of Ecuador and Argentina

The fact that a debt crisis may not be in the comings, does not mean that no action should be taken. To this end it is interesting to look at the cases of Argentina and Ecuador that did attempt (successfully) to reduce their debt burdens during 2020.

# 4.1. The Theory of Debt Restructurings

There is an extensive literature on debt restructurings asking how should they be done, what haircuts have they delivered, and how beneficial or costly have they been for the economies that went that path.<sup>11</sup> Here, I want to focus on this last question: How can we know if a restructuring is convenient for a country or not?

The response to the question needs to sort out, first, if the debt restructuring was strictly necessary. A brief paragraph on the theory of sovereign debt will clarify why.

The theory of sovereign debt started by asking the question of how a debt instrument that has weak legal protection as a result of the difficulties in litigating against sovereigns could exist. The literature has focused on three main explanations: fear of exclusion from markets, sanctions, and reputation effects. However, fear of exclusion and sanctions find little support in the data. Countries re-access markets very quickly after defaults and at interest rates that do not include a sizable penalty. When they do include a penalty it does not last long<sup>12</sup>. Sanctions, in turn, are seldom used. However, reputation effects do seem to matter. Restructurings, for example, lead to a collapse in FDI and local investment.<sup>13</sup> The reason is simple: if the government restructures the debt, why would I trust it will respect my property rights?

If reputation effects are key to assessing the costs of restructurings, it is important to know if the default was "unavoidable" or not. Grossman and van Huyck (1988) introduced the concept of "excusable default" which they define as a distress situation for which the debtor is not responsible. Grossman and van Huyck suggested that the market would provide relief in such circumstances making debt contracts much more flexible than usually thought. Of course, if a debt default is excusable or not is unobservable, which leads to a second observation: the harsher the haircut the less justifiable the restructuring becomes and the larger the costs of default. Cruces and Trebesch (2013) show in an ample base of haircuts that the larger the haircut the stronger markets punish the country going forward (they find that each 20 points of additional haircut leads to a higher financing cost of 150 bps, which declines over time but exhibits substantial persistence).<sup>14</sup> To make this long story short, we are saying that defaults impose a larger cost the more unjustifiable the default is. This is an important point because if the default is perceived as avoidable, the reputation effect may still be there regardless of the fact that the restructuring was voluntary.

The Cruces and Trebesch (2013) result is relevant because an area that has been less explored in the literature is the effect of restructurings on private sector wealth. There is of course, a literature on the impact of restructurings on

<sup>11</sup> The literature of sovereign debt is too large to reference here. Good summary references include Reinhart and Rogoff (2009), Abbas *et al.* (2019), Sturzenegger and Zettelmeyer (2007), Uribe and Schmitt-Grohé (2017).

<sup>12</sup> See Borensztein and Panizza (2009).

<sup>13</sup> See Fuentes and Saravia (2010).

<sup>14</sup> In a similar vein, Asonuma et al. (2014) find the result that restructurings that avoid a default are associated to lower output costs.



output (see for example Sturzenegger and Zettelmeyer (2006)), but little on the value of private sector assets. Without attempting to fill this gap here, we can think of a quick back of the envelope estimate.

In order to do so we need an estimate of private wealth and an estimate of the impact of the restructuring on that valuation. One way to approximate this number would be to use the change in cost of capital resulting from the restructuring and assessing how that change affects the value of private sector wealth. The change in the cost of capital may be related to the change in government spreads before and after the restructuring. A simple growth model suggests that the equilibrium capital output ratio equals

$$\frac{\mathcal{K}}{\Upsilon} = \frac{\alpha}{r+\delta} \tag{1}$$

where  $\mathcal{K}$  is he capital stock,  $\mathcal{Y}$  is output,  $\alpha$  the share of capital, r the interest rate, and  $\delta$  the depreciation rate. The reader can play with the numbers he or she may think reasonable. But a change in the discount factor would depress the desired amount of capital in the economy. This decline is an underestimate of the short run reduction in value: if the stock of capital has to fall, then prices need to fall below their steady state value to induce the desired reduction in the stock of capital. As we will see, we do not need to compute the short run effect to make our point, we will find that the long run effect on its own turns to be much larger than any possible savings obtained in public debt.

# 4.2. Argentina

In August 2020 Argentina reached an agreement to restructure its debt. The process ended after a grueling, and at moments, nerve-breaking negotiation that pushed bond values into the low 20s.

A two-year recession had increased debt yields over time while Argentina implemented a sharp fiscal adjustment within the context of an IMF led program. However, the primary elections of August 2019 signaled that a new government would come in. The Peronists, that had won by a significant margin those primaries, had campaigned on the idea that debt was unsustainable and that something had to be done. Their success brought panic in the market that saw bond prices plunging.

When the new government finally came in office in mid December of 2019, there were a series of back and forth overtures. The government received a proposal from bondholders to extend maturities and provide interest rate deferral for 2020. Initially the government suggested it would go this way, but eventually shifted to a tougher stance.

After much discussion, and now with the COVID-19 crisis as background, on April 21st of 2020 Argentina filed with the SEC a first restructuring proposal, which, assuming a 10% exit yield, implied a value for the new debt of around 40 cents on the dollar. This haircut was not the result mainly from a reduction in capital (which was reduced 3% for longer term bonds, and up to 10% for shorter maturity bonds), but mostly by pushing payments forward and reducing coupon rates. Prior to this offer, the government had remained current on all its dollar debt obligations as a way of conveying its willingness of reaching an amicable solution.



The deal also included a novel change in the application of collective action clauses.<sup>15</sup> According to the proposal the government would choose which bonds to include in the restructuring ex-post. This would allow to apply supermajority collective action clauses even when the majority thresholds were not attained for the entire stock of debt entering the exchange.<sup>16</sup> This implied that the government could restrict the bonds to be restructured to those in which the majority threshold was attained. After restructuring 100% of those bonds, it could offer a second exchange with slightly better conditions. As this would carry now the support of 100% of the previously restructured bonds, the majority thresholds would be more easily accessible, particularly if the government could, in a sequential manner, continue to choose the set of bonds so that the conditions were met. The government could thus advance in a series of successive steps restructuring bonds one or more at a time (hence the name of "Pacman" for this strategy).

The proposal was rejected by the bondholders, but the government decided to push ahead anyway. To strengthen its negotiation power during this period the government missed payments on several bonds, the first one the day after presenting the proposal, and therefore 30 days later was in default. The initial acceptance deadline was extended on the 8th of May, when it received a 13% acceptance rate. This low level of acceptance forced the government to sit in the negotiation table again, a process that required to extend the deadlines 5 times until a final agreement was reached.<sup>17</sup>

Finally, the government improved its offer to around 54 cents on the dollar (again valued at a 10% exit yield) by means of a smaller cut in capital for short term bonds, increasing coupons, paying PDI and imposing high participation thresholds that made the Pacman rules inconsequential. Still, however, average coupons would fall to about half.<sup>18</sup>

The final offer obtained a participation of 99% both in the local and foreign exchanges, thus triggering collective action clauses and allowing for an exchange without holdouts.<sup>19</sup> What is the assessment of this exchange? What kind of debt relief did it obtain? And then, what benefits or costs did it obtain as a result?

As explained in the previous section, to provide an answer we need to assess first how unsustainable Argentina's debt was. Table 4 gets us through the exercise by splitting Argentina's debt and providing a quick debt sustainability analysis. Starting from a total of 323 billion dollars in gross debt we net out intra-public sector debt, which the government owes to itself, and domestic debt in pesos.<sup>20</sup>

<sup>15</sup> Collective action clauses force the restructuring on all bondholders if a certain number of bondholders agree to a restructuring. While they were standard in London law bonds, they were not common in NY law bonds. NY courts, had a long tradition of not allowing changes in the payment terms of the bonds unless with unanimity, a doctrine that was presented as a way of avoiding any possibility of changing the relative seniority of bonds and equity in corporate bonds – a company could issue proxy bonds and use them to change the terms of payments in favor of equity holders. This doctrine had been extended to sovereign debt. After the Argentina default, collective action clauses became common in NY law sovereign debt. These clauses implied that once a certain number of bondholders on a specific bond agreed to a restructuring the changes applied to all holders of that bond. This strategy, however, did not provide safety against specific bondholders acquiring a large enough participation in specific bonds that allowed them to block the triggering of the collective action clauses which stated that in a restructuring if a certain percentage of bondholders considering all series agreed to a restructuring, then it applied irrespective of the level of acceptance within each individual bond. It became customary to add traditional bond by bond clauses and supermajority clauses in debt covenants.

**<sup>16</sup>** See Bolton et al. (2020a) and Gelpern et al. (2020) for a detailed explanation.

<sup>17</sup> This initial offer was strongly criticized but may have been part of the negotiation strategy.

<sup>18</sup> The government in parallel remained mostly performing on domestic currency debt, and rates eventually came down in that market. It also offered local law dollar debt the same terms as for international law debt. This improved the institutional strength for this market also bringing yields down.

<sup>19</sup> One peculiarity of the (local) exchange was that it included a number of bonds that were only held by the Central Bank with face value of 13,800 million. By merging these bonds together with the general pool of the bonds it enables the Central Bank to use these bonds, as described by an investor, by "bleeding" them into the market for sterilization or exchange rate intervention. Thus, the exchange had implicit a sizable dilution of the original offer through a potential increase in the debt stock equivalent to about 15% of the restructured debt.

<sup>20</sup> Peso debt is being rescheduled at a rate of inflation +2%. As Argentina's GDP has grown around 2% during the last 40 years, this debt poses no sustainability issue. IMF (2020) provides a summary of these numbers.



#### Table 4. Argentina's Debt Sustainability

	"Nominal Value (In USD Bn)"	(as % of GDP)
Total Debt	323	80.75
Intra Public Sector Debt	117	29.25
Net Debt	206	51.5
Domestic Peso Debt	36	9
Total Foreign Currency Debt	170	42.5
Multilaterals	73	18.25
Total foreign currency private sector debt	97	24.25
Average interest rate on foreign currency debt		5.50%
Expected Growth Rate		4%
Required Primary Surplus		0.60%
2019 Primary Surplus		-0.40%

Note: Computation assumes GDP 400 bn

Dollar denominated debt carries an average interest rate of 5,5% and nominal GDP may grow 4% in dollars (2% for the average real growth Argentina has experienced over the last 20 years and 2% to take into account US inflation). With a GDP of 400 billion, the 170 billion of foreign currency debt mounts to 42.5% of GDP and requires a primary surplus of 0.6%.<sup>21</sup> Considering that Argentina finished 2019 with a primary deficit of 0.4%, attaining sustainability did not appear an impossible feat. We can thus safely say that Argentina, while maybe liquidity constrained, did not face a solvency issue. This is relevant because, to the extent we accept this hypothesis, Argentina's restructuring appears to be better explained by unwillingness to pay rather than by need.

What was the benefit of the restructuring? Fig 12 shows the debt obligations (interest plus capital) before and after the restructuring. From these flows we can compute the haircut as well as the debt relief. The haircut measures the change in value when comparing the two cash flows at the exit yield.<sup>22</sup> Debt relief computes the savings but at an "equilibrium rate" which is typically lower than the exit yield. Debt relief provides a measure of the reduction in the value of debt in normal times, and may be a better description of the true savings.<sup>23</sup> Using the exit yield of 11.5% the haircut in this restructuring was of 43%, whereas using the average spread since 2005 of 9,8% as an "equilibrium" the debt relief does not differ much at 37%.

<sup>21</sup> The GDP estimation is controversial as it is unclear which FX should be used to convert the peso GDP to dollars. At any rate, the 400.000 billion represents a reasonable level. Q2 2020 GDP for Argentina was 310 billion at the official exchange rate.

<sup>22</sup> See Sturzenegger and Zettelmeyer (2008) and Cruces and Trebesch (2013).

<sup>23</sup> See Sturzenegger and Zettelmeyer (2007). The concept of debt relief is typically smaller than the haircut and can even be negative if countries extend maturities at above equilibrium rates.







Figure 12. Argentina's 2020 Debt Restructuring

How could we evaluate the benefits and costs of this restructuring? One way to do so is to compare the savings of the restructuring with the costs to the private sector. The savings are pretty clear. With a haircut of 43% on 97 billion in debt, the reduction in NPV is 41.7 billion. While there are no official statistics, we may assume that roughly half of that decrease applies to residents holding Argentina's debt, so that the net benefit for residents is slightly above 20 billion.

What is the effect on the value of private wealth? As we mentioned one way to approximate this is to estimate the change in the capital output ratio. Using (2) and assuming an r of 8% and a depreciation rate of 8%, the capital output ratio is 1.875 for a share of capital of 30% and 3.125 if the share of capital is 50%.<sup>24</sup> One rough estimator of the increase in the discount factor is to compare the spread in government debt before the primary elections and the exit yield of the restructuring. This change adds up to 2.23% (see Figure 13) which decreases the desired stock of capital output ratio to 1.64 in the first case and to 2.73 in the second case.





24 The r equal to 8% is an estimate that adds a 3% premia to sovereign spreads, likely an underestimation



In the case of Argentina with a GDP of 400.000 billion dollars, this entails a fall in desired long-term capital of between 94 billion and 157 billion depending on the capital share. As explained above this number is an underestimate of the short-term loss, indicating that the net gain from the debt restructuring most likely was negative.

Why do these numbers provide such a negative assessment of the cost-benefit of Argentina's restructuring? Basically, because the savings are small because the debt that was restructured was small and a large fraction was owned by residents themselves. In addition, the fact that the default was difficult to justify, implies that the credibility effect was large depleting the value of all of private wealth. In fact, Argentina has seen a collapse in its stock market throughout the year.

# 4.3. Ecuador

Ecuador followed a similar path to that of Argentina, though avoiding an explicit default. Ecuador's fiscal situation was somewhat more compromised than that of Argentina. An EFF for 4.2 billion agreed with the IMF in 2019 had gone off track and the deficit had remained relatively unwieldy. Market access was seriously compromised even prior to the COVID outbreak. Then in early 2020 Ecuador was affected by a double shock: the collapse in the price of oil, its main revenue source, and COVID which had hit Ecuador with particular strength in the initial weeks of 2020. As the situation deteriorated on April 13 the government issued a consent solicitation to delay around 811 million in payments through August, providing a time lapse sufficiently long, it hoped, to reach an agreement with creditors. The solicitation was quickly approved by an overwhelming majority of creditors.

There were several reasons for this support. First, that Ecuador had already done an adjustment in its fiscal accounts, moving its overall deficit from a peak of more than 8% in 2016 to around 3% in 2018 and 2019. Second, that Ecuador paid an amortization in early April, even in spite of the difficult short run scenario (at the same time announced it would use the 30 day margin for interest while it worked out a solution). This signaled the willingness of the government not to impose large haircuts on investors and to avoid a default. Thirdly, that debt to GDP stood at around 40%, thus implying that with an intelligent re-profiling debt could be serviced.

Of course, the fiscal situation deteriorated in 2020, and market access initially closed. In May the Fund granted, under the Rapid Financing Instrument, a 643 million loan, a sign that the IMF would provide a supportive environment for the economy going forward.

Eventually the negotiations continued and an agreement was reached in July with an overwhelming majority of creditors. This, however, did not occur without hiccups. In Contrarian Emerging Markets LP v. Republic of Ecuador a hedge fund sued the government in an attempt to block the proposal two days before the debt offer expired. The case was promptly dismissed by Judge Caproni of the Southern District of New and the proposal could move along.

Eligible bonds with an original face value of 17.4 billion were compressed in three bonds maturing in 2030, 2035 and 2040. Coupons suffered a reduction of about 42%, maturities were extended more than 10 years and capital was reduced about 9%. PDI was paid in the form of a 2030 bond issued separately. Figure 14 shows the cash flow of interest and capital before and after the restructuring. The debt relief was significant at 45% and given the high yields of Ecuador's debt at 11,9% (computed using the yields between 2004 and 2018) delivers a similar debt relief. Shortly after the agreement the Fund approved an EFF for 6.5 bn, in order to smooth the transition.



#### Figure 14. Ecuador's 2020 Debt Restructuring



How about our assessment of the cost and benefits of Ecuador's restructuring? Notice that the exit yield for Ecuador's debt restructuring, is actually below 11.9%, the average yield of Ecuador's debt between 2004 and 2018. If we use the same calculations as for Argentina, that is adding a 3% to the spread and using a 8% depreciation rate, the change from 11.9% to 11.5% actually reduces the discount factor, thus crowding in capital by somewhat less than 2 billion if the capital share is .3, and about 3 billion if the capital share is .5. In short, to the extent that yields did not change, neither does the valuation of private capital. The 45% debt reduction on 17.4 billion in debt adds close to 8 billion to the gain.

Of course, this computation is arbitrary. In the second half of 2019 the yield on Ecuador's debt had been 9%, so that the 11.5% exit yield again shows, relative to that rate a large increase. If using this 2.5% increase the fall in the desired capital stock ranges between 16 or 27 billion depending on the capital share.

In summary, the impact of a deterioration in the financing conditions and risk assessment on the private sector is likely to have a larger effect than the savings obtained through the debt renegotiation, though in the case of Ecuador, as argued, it may be difficult to conclude if this cost existed or not.

# 4.3.1. An Assessment

The cases of Argentina and Ecuador allow several conclusions. First, that it is feasible to restructure the terms of the bonds, thus showing that the collective action clause mechanism served its purpose. While the mechanism had already been used in several smaller restructurings within the region, these cases show that they could be used for larger debt stocks as well. In this dimension, the experiences can be deemed very successful.

Second, the Argentina case shows that a restructuring is feasible even under a situation of non-distress. Of course supermajority thresholds have to be reached, but the fact that they were (handsomely) reached in these restructurings poses the question of whether debt restructurings will become a more common occurrence in the future, and what kind of punishment the market may have to impose ex-ante on the possibility of "unjustifiable" debt exchanges. If this implies a new risk for sovereign debt going forward remains to be seen. If it does, it may put the asset class in a tailspin: more ex-ante risk, implies a higher cost, and the higher cost implies that there is a larger incentive to restructure later on, and so on ...

Third, that it is not clear that the debt restructurings entailed a net benefit for the countries when taking into account the impact on resident's wealth. As already discussed in the literature, the negative effect of a restructuring is directly related with how "excusable" the default is. The case of Argentina provides an example of how a large haircut



obtained in public debt may come at the price of a larger cost in terms of private wealth. To the extent that total wealth of residents is the objective there is not a clear case for debt restructurings. This result, in the case of Argentina, is compounded by the fact that the amount of restructured debt was relatively small relative to GDP, which naturally reduces the size of the benefit.

In the case of Ecuador, it is more difficult to precise if there was an increase in discount factors as a result of the debt restructuring. To the extent that there was, that cost is likely to be larger than the savings on debt, as debt to GDP to be restructured did not reach 20% of GDP.

Fourth, and on a smaller note, the attempt of Argentina to overrule the collective action clauses will probably lead to an improvement in their writing in the future, precluding the use of the Pacman approach, further strengthening the mechanisms for sovereign debt restructurings.

In all, the analysis suggests that while restructurings are feasible, perhaps even more than initially perceived, they are not cost free, and due to their impact on private sector wealth they are not so easily justified, even when haircuts are large and participation rates very significant as in the two cases discussed here.

# 5. Policy Options

The above analysis allows some preliminary conclusions:

- 1. Countries have used sovereign debt financing increasingly in recent years and have continued to do so this year.
- 2. After an initial retrenchment in early 2020 debt flows have remained available to Latam countries.
- 3. Debt sustainability does not seem to have been a problem coming into the crisis. It seems it will neither be a problem coming out of it.
- 4. Argentina and Ecuador show that standstills and debt relief are feasible, even in situations of questionable distress.
- 5. While debt restructurings are feasible, if difficult to argue that they provide benefits that are larger than the costs.

With these facts in mind it is difficult to see the need for a major upheaval of financial markets in the form of a general preemptive restructurings or outright defaults, less so the need for a change in international financial architecture.

Recent proposals for changes in debt contracts appeared early on when the uncertainties associated both to the outbreak and the availability of capital were at its height. As these uncertainties quelled so did the calls for deep reform.

But this does not mean that there are no lessons or policy implications. In what follows we try to review some of the proposals that have been discussed this year and add a few thoughts of our own

# 5.1. Official Lending

It is a historical fact that during upheavals official debt increases, compensating the possible retreat of private debt (see Horn et al. (2020)). Thus, it was predictable that in the context of COVID-19, multilateral financial institutions increased their support. The IMF stepped up the use of the Rapid Credit Facility, the Rapid Financing Instrument, the Flexible Credit line and the Catastrophe Containment and Relief Trust (though from this last one only Haiti was a beneficiary in the region). By September the amount granted in the region had summed up to 50 billion; however,



this support was less than 1% of the region's GDP. The IADB increased the support via the Contingent Credit Facility for Natural Disaster Emergencies with a cap on the smaller of 100 million or 1% of GDP. In either case the scope of official lending appears limited.

In April G20 countries agreed to a temporary debt service standstill on bilateral official loan repayments from a group of 76 of the poorest countries (the so-called IDA countries plus Angola). Yet, Gulati (2020) estimates that this standstill was equivalent to 2% of the potential financing shortfall of low and middle income countries in 2020.

These solutions, while well intended, appear difficult to scale up on short notice, and official lenders don't have the muscle to compensate private capital flow swings. This is the reason why the discussion shifted to a discussion of potential improvements that may allow to provide better insurance quickly and encompassing both public and private creditors.

# 5.2. Property Rights

During a health crisis such as that of this year, the economy moves to a "hibernation" state where you cannot produce and you cannot or don't want to consume.<sup>25</sup> It's as if the economy chooses not to operate or to do so at a reduced scale during this period. Lockdowns are the way this choice is implemented. But lockdowns, because they focus on the health of workers, typically define quite well the constraints to the use of labor, while a much fuzzier approach is taken relative to the use of capital. In other words, labor may enter a standstill forced by regulation while capital obligations, including debt payments, remain undefined.

In that context there is a discussion to be had on how to handle payments to capital during lockdowns. For example, if the state does not allow a worker to go to work, why does it at the same time allow its landowner to charge him his rent? It appears that the lockdown for the worker should somehow correlate with the lockdown in some of the obligations this worker has. Of course, this is difficult to implement because not all workers are affected the same way but does not mean the issue should not be addressed ex-ante. It seems natural that a correlation should be established between the restrictions imposed by the lockdowns on certain players and the obligations of those players with other parties. This appears both an uncomfortable and necessary discussion to be had in anticipation of future events.

Applied to a country, the analogy is clearer and the implementation perhaps more straightforward. If a country is quarantined it makes sense to quarantine the debt payments that were to be funded with the GDP that is no longer produced. But this is the standstill proposal to which we now turn.

# 5.3. Standstills

Early in the year a distinguished set of colleagues argued in what was later referred to as the "Bolton proposal" that a standstill in debt payments was called for by the severity of the crisis.<sup>26</sup> The pledge was motivated by the fear that countries may be caught in the need to divert payment from health to interest. At the time of the proposal, as mentioned above, official bilateral debt to poor countries was granted a standstill for the year, thus providing an initial coordinated signal in this direction.

<sup>25</sup> See, for example, Sturzenegger et al. (2020).

<sup>26</sup> See Bolton et al. (2020b).



Yet this idea cannot be arbitrarily implemented, nor can it be expected that the market will graciously provide such relief (in fact in Ecuador the market allowed for a standstill but the final agreement acknowledged the PDI for this period). Gelpern *et al.* (2020), Bolton *et al.* (2020a) and Bolton *et al.* (2020b) propose an alternative. In a nutshell their proposal is to set aside the payment of interest so that it can be used for pandemic related spending. To avoid any opportunistic behavior this spending would be supervised by international organizations. This proposal, however, lost traction over the following months as the COVID-19 outbreak did not develop the explosive characteristics that initial SIR models predicted.

The proposal simply translated to the scope of sovereign debt, a policy that is quite common in other settings. Standstills are common in banking and tax regulation. They are used, for example, when a state or region is deemed a "disaster area". Typically, banking regulation puts a stay on contractual arrangements such as credit provisioning and interest payments. Classifying a certain area as a "disaster area" also entails stays in tax payments and produces automatically a deferral of deadlines. So when a trustworthy body can be found to establish when this "disaster" situation occurs, a similar approach could be included in sovereign debt.

On a cautionary note, Hatchondo *et al.* (2020) make the point that if shocks are large enough standstills are improved upon by a transaction that includes some debt relief. The reason a restructuring increases the value for all parties is because as debt becomes more difficult to pay (and the standstill just pushes the problem forward) the risk of default increases. Beyond a certain debt threshold a haircut that makes debt sustainable is better for all, very much as when a private company restructures its debt to recover profitability. This is the point also made by Guzman *et al.* (2016): if debt restructurings do not guarantee sustainability, they do not help solve the issue at hand. If shocks are small, on the other hand, the benefits of the standstill are small as well and countries may prefer to avoid any re-profiling.

This leaves relatively little room for implementation of standstills as they appear to be dominated by inaction if the shock is not too large, and by restructuring if the shock is large enough.

Still this does not mean that clauses aimed at taking into account this type of phenomena should not be considered. Pre-arranging for a standstill in the face of catastrophic events could be included in future bond covenants to the extent that a neutral organization or objective indicator can be found to trigger the clause. For example, allowing debt to be postponed or rolled over at a low interest rate if world growth is less than a given threshold can be easily included in future lending agreements. Multilateral financial institutions should spearhead this effort, perhaps including them in their own covenants a version of contingent debt to which we now turn.

# 5.4. Contingent Debt

It seems all too natural to issue debt that is contingent on some risk factors or some specific outcomes. A clause producing a standstill in the case of a pandemia, a natural disaster, a world recession, or a spike in the VIX index could be examples of this.

Contingent debt has been extensively analyzed in academic and policy circles. They are classified in those in which interest and/or principal is tied to a given event (linkers), those where the size of the payments is tied to certain events (floaters) and those that delay maturity upon the triggering of certain events (extendibles). (See IMF (2017) for a review).<sup>27</sup>

<sup>27</sup> The debt standstill discussed in the previous subsection is an example of a linker, where payments depend on the triggering of a specific event.



While the idea makes perfect sense, so far they have not gained much traction for several reasons: a) first because contingent payment entails the valuation of an "insurance" premia in the bonds which markets find difficult to price so end up charging a high price; contingent debt can be expensive<sup>28</sup>; b) some of the contingent clauses are subject to important moral hazard problems, not only in terms of policy (you may change policies to force the triggering of the clause) or in data manipulation as when Argentina allegedly manipulated its growth data for 2013 to avoid paying its GDP indexed bond. c) It provides an improvement only if investors can diversify their risk cheaper than a sovereign can, an assumption that we would be hard pressed to think holds regularly. It may occur in the face of very idiosyncratic shocks but not necessarily if these are strongly correlated with global shocks.

Mitigation for some of these problems can be thought out. For example Gelpern et al. (2020) proposes the challenging idea of using a UN Security Council Resolution, under Chapter VII of the UN Charter, as "used in 2003 to temporary shield Iraq's assets from creditors, bolstered by domestic legal measures in the United States and the United Kingdom" as an exogenous trigger to avoid moral hazard issues.

Buchheit and Gulati (2020) suggest a COVID-codicil, that is, to introduce a series of rules for which collective action clauses are facilitated (i.e. require smaller majorities) within very specific events, a very clear time frame and the participation of a third party such as the IMF.

While from a conceptual point of view the framework is clear, so far markets seem to prefer splitting risks in instruments that focus on one specific risk, so that the bundling in one instrument remains challenging and taxing.

Many legal frameworks include the concept of "force majeur", an unexpected change in the conditions under which a contract has been signed, allowing for change. While some authors have suggested the use of "force majeur", we believe its use in sovereign debt would generate too much uncertainty and is unlikely to stand in court, particularly when most countries remain current on their payments. Thus, this approach should be discarded in favor of trying to build contractual clauses that specify the type of events and risks to be covered.

# 5.5 Debt Buybacks

Stiglitz and Rashid (2020) have suggested the possibility of debt buybacks as a way of reducing debt burdens.<sup>29</sup> This approach can be thought as a specific form of debt restructuring: one where the compensation to creditors is cash.<sup>30</sup> One common critique to this approach is that the debt buyback would push the price of debt upwards becoming self-defeating, but the same is true of any restructuring and yet sizable haircuts have been obtained. In our view, this appears not to be a strong criticism.

But regardless of the cost-benefit of pushing for a large haircut that we discussed above, the problem with this proposal is the availability of funds to do such buybacks. The fact that debt restructurings typically issue debt at below market rates, implies that cancelling debt with cash really provides no distinctive benefit to the debtor, and has thus been less used in recent times, except perhaps as "sweateners" in some debt deals.

<sup>28</sup> In some cases the remedy may be worse than what it was supposed to fix. An example is Argentina's F(loating)RAN bond, issued in the 1990s and that had a payment tied to country risk. When a few years later Argentina defaulted this bond started accruing rates of around 50% yearly, so that a 300 million initial offering ended up costing 6 billion dollars a few years later.

<sup>29</sup> The canonical paper is Krugman (1988) who first proposed the idea that debt relief can be beneficial for both parties.

<sup>30</sup> In the 80s some debt buybacks were also made in exchange for equity of state owned enterprises.



# 5.6. Maturity of Debt

Up to the late XIXth century most of sovereign debt was issued in the form of consols, i.e. perpetuities that could be repurchased at par at any time. When the gold standard was abandoned these instruments were discontinued: shorter maturities acted as a commitment mechanism for better fiscal behavior, particularly to avoid the possibility of the governments defaulting on the principal through higher than expected inflation.

Inflation adjusted bonds would allow to recreate the structure of the traditional consols. What advantage would this financing strategy have? We see a few. First, a perpetuity would provide an optimal allocation of debt burden across generations as would be suggested in any optimal planning setup. The structure of consols also reduces the risk of debt events because it avoids the need of abrupt changes in financing requirements. For example, the steep step up in the coupon payments of the recent Argentine restructuring leads to abrupt changes in the financing needs that generates additional risk. Finally, the lack of rollovers also reduces the risks of the debt itself and the vulnerability of a withdrawal of funding. Thus, while a consol structure would not provide the kind of insurance effects that we discussed above it would reduce distress.

With the risk of inflation out of the way with inflation indexed bonds, why are these bonds not used? One simple answer is cost. As maturities extend a positively sloped yield curve means that long term financing is more expensive than short term debt and there is no longer debt than consols! As we mentioned above the upward sloping yield curve derives from commitment and dilution problems associated to long term debt.

However, we would like to argue that the consol framework could lead to a more optimal level of debt. The reason for this is that short term debt actually distorts the perception of the cost of debt by reducing it. Shafir et al. (1997) show that when faced with two streams of income, one that is larger in real value but lower in nominal value, people tend to get confused and choose the payment which has larger nominal streams. Applied to debt this implies that the perceived cost of long-term debt is larger than that of short term debt, even if in present value long term debt may be cheaper. For example, when comparing a debt that pays a 5% interest rate for 10 years with a 100 year bond that pays 4% for 100 years. Shafir, Diamond and Tversky results suggests that people would choose the 5% interest rate bond which has total payments of 150 vs a payment of 500 in the century bond. Yet the century bond is cheaper.

Thus, the use of short-term debt "biases" the perception on the costs of debt to the downside, a bias that is larger the shorter the maturity of the debt. The use of perpetuities changes the perception of the cost of debt, and would, arguably lead to much lower use of debt. Lower levels of debt, in turn, would provide a stronger position to use debt at moments of distress.

In the 1990s the asset class of sovereign debt developed as a "creation" nudged into existence by the support of the US treasury that guaranteed the capital of Brady Bonds. In the same vein long term consols could become a new innovation that can be explored, why not, in multilateral debt.

# 5.7. Summing Up

Back in 2000, in the face of substantial debt defaults, there was a large debate on whether a concerted multilateral or multinational mechanism should be implemented to deal with sovereign debt distress. On the other side of the aisle was the contractual view, the idea that contracts could contain a number of clauses that would allow the required flexibility for successful restructurings. The contractual view carried the day and has allowed for sovereign debt markets to grow in strength over the years, while allowing for occasional debt restructurings.



2020 put this framework to test. For starters, the market continued to function relatively normally, and financing remained open and available. At the same time, several restructurings were completed successfully. In fact, if anything, we could say that the framework allowed restructurings even when sustainability was not obviously at stake.

This relative success, however, does not mean that the system cannot be improved upon. First of all, a discussion of property rights upon disruptive events such as those experienced this year is well justified. If an economy suffers a mayor upheaval, there is a discussion to be had on what contracts and property rights should be enforced and which should be paused, debt among others. The COVID-19 crisis showed this was an issue we were utterly unprepared for. Including covenants identifying catastrophic events under which payment may become contingent or delayed, exploring the role of multilaterals providing independent identification of these events, and exploring longer term maturities as a way of reducing risks at moments of distress or correcting the underestimation bias produced by short term debt are possible avenues that remain open for exploration.

What is clear is that sovereign debt is well an alive, and while always subject to improvement, it has done the job quite well.

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