

External Sustainability Analysis:

Methods and Policy Issues

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Abstract*

This policy brief summarizes a conference on recent developments in the analysis of current account sustainability held by Research Department of the Inter-American Development Bank (IDB) and Banco de la República de Colombia organized on April 18, 2017 in Washington, DC. The purpose of the conference was to bring together economists from central banks, finance ministries, international organizations, and academics to discuss recent developments and new perspectives on the analysis of current account sustainability. The discussion was divided into three sections: i) methodological issues, ii) practical issues and iii) policy discussion, which are summarized in this document.

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1. Introduction

The Research Department of the Inter-American Development Bank (IDB) and Banco de la República de Colombia organized a conference on recent developments in the analysis of current account sustainability.¹ The purpose of the conference was to bring together economists from central banks, finance ministries, international organizations, and academics to discuss recent developments and new perspectives on the analysis of current account sustainability.

The discussion was divided into three sections: i) methodological issues, ii) practical issues and iii) policy discussion, which are summarized in this document.

2. Fiscal Policy Procyclicality and External Sustainability: What Is the Link?

The first presentation was by Rudy Lama (IMF) who presented work in progress with Carlos Végh (World Bank) and Guillermo Vuletin (IDB). Mr. Lama began showing empirical evidence of the positive correlation between the volatility of public consumption (i.e., a proxy of fiscal policy volatility) and the volatility of the current account balance across countries. He also showed that there is a positive correlation between the procyclicality of the current account deficit (i.e., the correlation between the current account deficit and GDP) and the procyclicality of public consumption (fiscal policy). The former suggests that the degree of cyclicity in fiscal policy may be related to the sustainability of external accounts.

After presenting the stylized facts, Lama presented a theoretical model trying to rationalize the link between the fiscal policy regime and external accounts. The model focuses on how a change in the fiscal regime (specifically, the degree of procyclicality of fiscal policy) affects the current account over a scenario with boom-bust shocks in interest rates. The calibration of the model shows that during a boom, there is an appreciation of the real exchange rate and therefore, a widening of the current account deficit. A reversal takes place during the bust. The main finding is that the characteristics of the fiscal regime can have different impacts in terms of current account cyclicity and on its volatility. Specifically, in the procyclical fiscal policy case there is a higher volatility of the real exchange rate and the current account than in the countercyclical fiscal policy case. A corollary is that a decline in fiscal procyclicality would lead to more stable current accounts

¹ The conference was held at the IDB headquarters in Washington D.C. on April 18, 2017. Conference website and supporting materials available at: <https://events.iadb.org/calendar/eventDetail.aspx?lang=en&id=5281&>.

and, through that channel, it may also improve the sustainability of countries' external accounts. Moreover, simulations based on the model show that the effectiveness of a countercyclical fiscal policy as a stabilizing tool increases when business cycles are more persistent and volatile, which is usually the case in emerging markets.

Following Lama's presentation, the next session featured a panel discussion in which Eduardo Cavallo of the IDB, Oscar Valencia of Banco de la República, Shaghil Ahmed of the U.S. Federal Reserve Board, and Luis Cubbedu of the IMF presented the frameworks that each institution uses to assess external accounts' sustainability.

3. Methodologies for External Accounts Sustainability Analysis

3.1 IDB Methodology

The External Sustainability Assessment (ESA) framework at the IDB has many features in common with, and some important differences from, Debt Sustainability Analysis (DSA). In the ESA the unit of analysis is Net Foreign Liabilities, or NFL (in DSA it is total public debt); ESA focuses on both public and private sector (DSA is only public sector); and ESA encompasses all external assets and liabilities of a country: debt, foreign direct investment (FDI), portfolio equity and international reserves (DSA focuses on debt liabilities only). Formally, there is only one area of intersection between DSA and ESA, which is the public external debt of the public sector. Notwithstanding the differences in scope, the concepts and models applied to ESA are similar to those applied to DSA.

The ESA framework used by the IDB is based on three models: the standard approach, the dynamic approach, and the Fan-Chart approach.²

The standard approach uses basic external accounts' identities to determine the level of non-income current account balance that is required to stabilize the ratio of NFA to GDP at a benchmark level. It is akin to the Blanchard-Buiter model that is commonly applied in DSA analyses.

The dynamic approach builds a projected (baseline) path of NFL/GDP over a five-year horizon based on assumptions regarding the medium-term trajectories of the main determinants of the dynamics of the NFL. It also explores how the baseline trajectory is affected by shocks to the

² See Castillo (2016a and 2016b).

determinants of the dynamics of the NFL. For example, it simulates the impacts on the expected trajectory of NFL/GDP of one-standard deviation shocks to the real returns on foreign assets and liabilities over the forecasting horizon; or similar-sized shocks to the growth rate of the economy over the forecasting horizon. The basic intuition is that the external accounts remain sustainable as long as the NFL/GDP is not expected to spiral out of control over the forecasting horizon, neither under the baseline nor given the simulated shocks.

The third approach developed by the IDB is the Fan-Chart analysis. It lays out the expected future dynamic path of the NFL over GDP incorporating uncertainty into the analysis by randomly simulating many shocks to each of its underlying determinants of the dynamics of the NFL. Therefore, this methodology allows to make a Value at Risk assessment using several projections for NFL/GDP and the probability of each scenario being below or above a selected threshold.

A missing element in the analysis is what are the country-specific thresholds for sustainable NFL as a percentage of GDP (i.e., the level of NFL above which the country is likely to run into an unsustainable situation). Future research should focus on determining country-specific thresholds. In the meantime, the users of the IDB toolkit are encouraged to explore using different thresholds depending on the case study.

3.2 Banco de la República Methodology

The methodologies used by Banco de la República (BdR) are complementary to the IDB's template because they go in the direction of establishing “sustainability thresholds.” Specifically, the BdR models focus on evaluating empirically the sustainability of the current account. Emerging economies commonly suffer episodes of sudden stops in capital flows, they usually experience abrupt changes in country-risk spreads, and changes in exchanges rates that impose “nonlinearities” in the dynamics of the current account balance. The set of tools used at BdR establishes empirical criteria to determine the sustainability of the current account using univariate and multivariate regression models considering nonlinearities in the data.

As a primer, BdR considers univariate models with exogenous thresholds (i.e., Markov Switching models). The sustainability regimes are characterized by the existence of a unit-root in the dynamics of the current account as a percentage of GDP. The switch between regimes is captured through a transition probability matrix of a Markov chain. This permits the estimation of useful statistics on the duration and the likelihood of staying in stable or unstable regimes.

Other univariate models are: the threshold autoregressive model (TAR) and the smooth transition autoregressive model (STAR).³ These are semi-parametric methodologies with transition between regimes. These models are very useful to find endogenous thresholds that determine the degree of sustainability of the current account balance. The advantage of these methodologies is that they provide information about the regimes and the adjustment speed among them.

The rest of the methodologies are multivariate regression models. In particular, BdR uses cointegration models between income and expenditure in the current account. The models allow exploring the interactions between the components of the current account (income and expenditure) and the implications of those interactions for current account sustainability.

In addition, Ordoñez et al. (2017)⁴ recently proposed an endogenous Threshold Vector Error Correction (TVEC) model. This model allows evaluating long term dynamics in the context of a vector correction model like Johansen (1988). Moreover, the methodology analyzes nonlinearities in the short-term adjustment controlled by an endogenous threshold.

3.3 The U.S. Fed's Perspective

Concerns regarding U.S. current account sustainability have waned since the pre-Global Financial Crisis (GFC) period. In the mid-2000, the United States had a large deficit in its current account, reaching a peak in 2005 but improving from there on. The Net International Investment Position (NIIP) has deteriorated throughout since 1985, even after the deficit started improving. The United States uses NIIP/GDP as a metric of a necessary condition for sustainability. Having a stable NIIP/GDP implies that NIIP grows at the same rate as GDP. However, this is not a sufficient condition for external sustainability.

Since mid-2014, the trade balance in the United States has not moved as much as expected given the USD appreciation. This is partly due to the fall in U.S. oil imports (as a result of the ramp-up of domestic production and the fall in oil price) and due to the cyclical weakness of U.S. imports (the trade-sensitive components of domestic demand were weak). Another factor that reduces the current account deficit is that the United States continues to earn positive net

³ Christopoulos and León-Ledesma (2010).

⁴ See Ordoñez-Callamand, Melo-Velandia and Valencia-Arana (2017).

investment income (NII) despite increasingly negative NIIP. In fact, NII has grown since the mid-2000s.

In order to study current account sustainability, the Federal Reserve Board uses a partial equilibrium U.S. International Transactions (USIT) model. This model works with several hundred equations, including identities and several estimated behavioral equations. The model projects U.S. external balances/positions in four categories: trade flows, non-trade components of the current account, financial flows and investment positions comprising NIIP. Simulations from running the model suggest that the trade and current account deficits will widen again in the next few years, but then deficits tend to narrow around 2020. Net investment income declines in the near term. NIIP continues declining after 2020 but then stabilizes around 2030. However, if assumptions change and, for instance, the dollar continues to appreciate for a long time, the current account deficit would not narrow by 2030. If instead, the dollar depreciates, current account and trade deficits would narrow faster.

There are some advantages and challenges of working with this type of model. First, the dollar path is treated as exogenous, which would not hold true, in particular, over a period of unstable NIIP/GDP when the exchange rate would be an adjustment factor. Second, substantial detail in the partial equilibrium model allows the user to look at the composition of assets and liabilities. Lastly, partial equilibrium helps the user to understand and quantify transmission mechanisms from which better judgments can be made.

3.4 IMF Assessments

A key aspect of the IMF mandate is to monitor the evolution of global imbalances, and to identify when these imbalances become too large. The recent evolution of global imbalances shows an increase through the Global Financial Crisis (GFC), driven by higher deficits by the United States and Periphery Euro Area countries, and higher surpluses from China and other Asian economies as well as oil exporters. Global imbalances have narrowed since the GFC. One interesting phenomenon is the reconfiguration that has taken place. Particularly, deficits have been reduced from 2013 to 2016 for Emerging Market economies such as Brazil, South Africa, India, Indonesia and Turkey. As expected, the surpluses of oil exporters have declined. However, the deficit has continued increasing in the United States

A relevant question for the IMF is whether that change in the composition of the global imbalances matters and whether imbalances are still too large. There is not a one-size-fits-all rule, as for example, under certain conditions deficits could be beneficial for economic growth. Cross-country models do not necessarily capture all countries' specificities. Therefore, the IMF conducts a multilateral approach called External Balance Assessment (EBA) methodology,⁵ which comprises three methods. Two methods are panel regression-based analyses of the current account and real exchange rate whereas the third method is model-free and focused on external sustainability analysis. EBA takes into account a broad set of factors—including policies, cyclical conditions, and global capital market conditions—that may influence the current account and real exchange rate. As a complement to the EBA, there is a “role of judgment” of IMF staff in the analysis it conducts.

EBA uses panel regression models, which weighs several country fundamentals such as income per capita (relative to the rest of the world), projected growth, institutional risk, demographic composition, and trade/financial openness. Among some special features that are also considered are reserve currency status, whether the country is an oil exporter and whether it is a financial center. Lastly, there are “desired policies” that the model assesses, which are fiscal balance, health spending, credit growth and reserve/capital controls. All these characteristics determine what would be the current account balance and the real exchange rate “norms” for a country. Then separately, the actual current account balance and the real exchange rate are stripped of temporary factors (output gap, terms of trade and VIX) to arrive to “cyclically adjusted” values of these variables. The difference between the model-based norms and the cyclically adjusted values determines the “gaps” for the two variables.

Therefore, this model permits the identification of policies that are required to eliminate any identified excesses, or gaps. Lastly, there is a residual which represents what the model is not capturing. The interpretation of this residual is subject to the judgment of IMF staff.

Current account norms differ for every country. Switzerland, Russia, Netherlands, Germany are countries with high norms. In the case of Switzerland, the reason is that it is a financial center, its expected growth rate is low and GDP per capita is high. Russia has a high norm due to being a large oil exporter. Among the countries with lower norms are India, Brazil

⁵ See Phillips et al. (2013).

and Mexico. These countries have low norms because their expected growth rates are high and their income per capita relative to the rest of the world are low—i.e., they are in need of capital. In the case of the United States its norm is lower than other advanced economies due to being a reserve currency, which reduces the norm. Therefore, the United States could live with a current account deficit of about 1 to 1.5 percent of GDP.

Although numerical inputs are helpful to assess the country's situation, some specificities may be missed. Therefore, staff judgement is crucial as a complement of the model.

To conclude, the model provides multilaterally consistent estimates, yet not all relevant country-specific features can be captured. Country-specific insights are necessary to arrive at an overall assessment. Also, adjustments need to be well justified, applied in evenhanded fashion, and add up to be multilaterally consistent.

4. The Case of Turkey

Following the policy panel, Professor Sebnem Kalemli-Ozcan from the University of Maryland presented the case of Turkey.

In Emerging Markets, business cycles comove with credit cycles. And in turn, capital flows go together with credit cycles. This puts an issue on the table: there is a tradeoff between access to external funding and domestic financial stability. Under a scenario of loose monetary policy in United States and high global risk appetite, the response from the central banks in emerging markets is unclear (i.e., whether to raise or lower the interest rate).

In the Turkish case (2003-2013 after a crisis in 2001), Professor Kalemli-Ozcan claims that regardless of the policy stance, exogenous capital inflows reduced borrowing costs of agents (especially firms), which led to a credit expansion. The current account was in deficit throughout this period. Domestic credit growth also grew throughout this period. The macroprudential policies implemented by the Turkish Central Bank beginning in 2009 do not appear to have broken the cycle.

To explore if Turkey faces an external sustainability problem, it is necessary to identify the origin and the destination of capital flows into the local economy. Regarding the origin, there is evidence that capital flows into Turkey were largely supply driven (external factors). Regarding the destination: most of the capital inflows to Turkey came in the form of external borrowing from the domestic banking sector.

To the extent that supply-driven capital inflows help to relax local financial conditions, funding for domestic banks becomes cheap and easy, which implies that the central bank should closely monitor capital flows because they provide the main transmission channel for spillovers to the rest of the economy. In the Turkish case, there is evidence of the impact of a global push factor such as VIX on domestic loan growth via capital inflows.

Per estimates presented by Professor Kalemli-Ozcan, an increase in capital inflows equivalent to its interquartile range leads to a 1 percentage point reduction in real borrowing costs. Moreover, supply-driven capital inflows in this country explain 43 percent of aggregate corporate sector cyclical credit growth on average. This process led to widening of the current account deficit (because banks borrowed cheap from abroad) and led to a decrease in lending rates, particularly for risky firms. In other words, the transmission channel for spillovers in Turkey seem to operate through lowering borrowing rates faced by all firms in the economy when banks manage to borrow cheaply abroad. Risky firms are the ones that benefit most from that effect. This suggests that capital flows affect the current account balance and that they also explain a large part of the domestic credit cycle.

In response to these developments, the Turkish Central Bank launched a macroprudential policy framework focusing on bank regulation and FX lending. In 2009, the Central Bank restricted non-FX-earnings companies to borrow in FX from local banks only if the amount of borrowing exceeded US\$5 million. The objective was to limit FX corporate borrowing from local banks only to large diversified companies with big balance sheets. In September 2010, the central bank imposed the standard reserves requirements and began using an interest rate corridor as macroprudential tools. In December 2010, a loan-to-value ceiling of 75 percent was introduced on housing loans to consumers and 50 percent on the purchases of commercial real estate purchases. In April 2011, the Central Bank started applying moral suasion, stating that the appropriate credit growth rate for Turkey was 25 percent and trying to convince banks to limit credit growth to that amount. In September 2011, the Central Bank also introduced the reserve options mechanism (ROM), which allows banks to use their FX and gold reserves in exchange for local currency-denominated reserve requirements.

Was there any change in the domestic credit cycle because of these macroprudential policies introduced by the central bank? The answer per Professor Kalemli-Ozcan is No.

Regardless of policy stance and macroprudential tools, exogenous capital inflows reduced borrowing costs of firms and households in Turkey and led to a credit expansion.

5. Policy Issues

The next panel featured a policy discussion about practical issues faced by policymakers, with the participation of the central banks of Mexico (Daniel Chiquiar), Colombia (Franz Hamann), Argentina (Andrés Neumeyer) Chile (Alberto Naudón), and IDB Chief Economist José Juan Ruiz.

The discussion centered on three questions presented by the moderator, Mr. Eduardo Borensztein.

Question 1. When should a central bank be concerned about the level of the current account deficit?

The participants agreed that the answer depends on the sources of the current account deficit and the financing conditions available. In general, current account deficits become a policy issue when external financing conditions are tight. It is also important to consider the type of shocks that beset the economy: whether they are temporary, permanent, or persistent; and whether they were anticipated or not. It is also important to consider what economic sectors are affected by the shocks. In fact, the current account balance per se is a poor indicator of what is going on in the economy, in the sense that a change in it could be a symptom of something good or bad. Therefore, *the most important thing is not the current account balance per se; instead, it is more important to understand what are the determinants of the current account balance, what are the underlying dynamics of those determinants, and the allocation of resources among economic sectors.* For example, two key elements for policymakers are: understanding the incentives of the non-financial private sector, the banks and the government, and learning about the capacity of the country to face changes in the macroeconomic environment.

Another important element to consider is whether a country has the capacity to hedge against risks or external shocks. In Latin America, for example, many countries have suffered terms of trade shocks due to the fall in commodity prices. This threatened the sustainability of outstanding current account balances in many countries. The problem for those countries is that central banks do not have a full set of financial instruments to hedge against these shocks. If those instruments were available, the sustainability assessment probably would have changed.

Question 2. How does the central bank react to an external imbalance? What kind of instruments does it use? Does it use interest rates or rather focuses on exchange rate policy directly or macroprudential tools? And does reacting to external imbalances create a conflict with the inflation objective of the central bank?

The challenge for the central bank is to have a good diagnosis and, if action is necessary, to react before other actors in the economy. The challenge for the central bank is to be the first policy mover.

The central bank should not be targeting the level of the current account per se. Instead, it must address the root causes of the current account deficit if it considers that it represents a symptom of disequilibria. In this vein, it is difficult to give a single policy prescription, because it all depends on the specific circumstances. It might be the case in which fiscal disequilibria are leading to current account imbalances, or private sector overspending, or indebtedness disequilibria. Or instead, perhaps the economy is experiencing external shocks. In each of those cases, the policy responses from the central bank may be different.

Using monetary policy through the policy interest rate to try to address current account deficits may be useless. This is so because rate changes may produce undesirable side effects. For example, if there is a capital inflow that is leading to a large current account deficit and the central bank raises the interest rate, this will attract more capital inflows, leading to a very bad equilibrium, or placing the economy on an unsustainable path. Instead, if the central bank lowers the interest rate, the inflation target could be at risk. This trade-off can make monetary policy an inefficient mechanism to solve the situation.

Enter macroprudential policies. These policies are used to regulate the financial sector; they could be helpful to control over indebtedness and to guarantee financial stability. Moreover, the implementation of macroprudential policies can have significant impacts on external accounts, the scope of which may vary depending for example on whether the central bank tries to surprise market participants, or if it announces the policy changes.

In terms of exchange rate policies, flexible nominal exchange rates help to absorb external shocks without threatening to de-anchor inflation expectations, if the pass-through from the exchange rate to inflation is low. This in turn requires having a credible inflation target.

Question 3. What other policies, out of control of the central bank, or institutional development should countries use to deal with external imbalances or external shocks?

Fiscal policy should respond to guarantee the sustainability of the current account when there are, for example, terms of trade shocks that affect public revenues in a permanent or persistent manner. In general terms, fiscal policy is useful especially when the situation requires an adjustment in domestic absorption through public sector spending.

In the non-financial private sector, good and streamlined bankruptcy procedures are desirable, especially when there is evidence of over indebtedness. It is also important to have good macroprudential regulation, well-capitalized banks, and bankruptcy resolution mechanisms to ensure the stability of the banking system in the face of external shocks. These are always desirable macroeconomic policies, and not only for current account sustainability.

In the face of capital inflows leading to increasing current account deficits, it is important for countries to develop policies that incentivize “good” investments in productive sectors of their economies. This is pertinent to align incentives and having positive private and social rates of return, while avoiding allocation of capital to unsustainable sectors.

Considering that many times the problems that are manifested through the current account balance are micro, the first-best solution for them may not be a macro instrument, like the policy interest rate. The solutions should be focused on the specific sectors that are affected, and tailored to address their situation.

The effectiveness of the macroeconomic policies to respond to external shocks, no matter what the mix may be, is enhanced when countries have institutions in which inflationary expectations remain well anchored, and when governments have a credible fiscal rule.

To sum up, per the panelists’ consensus, what really matters when dealing with external shocks that affect the current account (and that may threaten its sustainability) is having a coherent macroeconomic policy framework that includes: i) a credible fiscal rule, ii) floating exchange rates that help to absorb external shocks, financial regulation to diminish financial vulnerabilities, and a monetary policy framework anchored in a flexible inflation targeting regime. This is a good mix of policies that can lead the economy to adjust smoothly in the face of external shocks, while discouraging people from taking on too much risk.

6. Policies for Managing External Shocks in Commodity-Exporting Countries

The closing lecture of the day, delivered by professor Jeffrey Frankel of the Kennedy School of Government at Harvard University, focused on policy issues pertaining to current account sustainability.

Most Latin American countries are commodity exporters, a type of good that usually has higher volatility than others. *Why is it so difficult for commodity-exporters to use financial markets to smooth trade fluctuations?* For example, if international financial markets worked well, countries facing temporary trade shocks could finance their deficits through external borrowing. However, this is usually not the case. Instead, countries tend to have procyclical capital flows.

Some thought is required to build institutions that can protect against external accounts' volatility. Professor Frankel put forward four proposals: i) hedging, ii) debt denomination, iii) fiscal policy and iv) monetary policy.

Idea 1: Commodity Options. It is worthwhile to use options to hedge against downside fluctuations of the nominal price of the export commodity. For example, Mexico already does this for the price of oil. Instead, using forwards or futures is not a good idea because the government will be credited if prices go down but highly blamed if they go up.⁶ Options avoid the political economy problems of forwards and futures because countries keep the upside gain but hedge the downside risk.

Idea 2: Commodity Bonds. The idea is to hedge against long-term fluctuations in nominal commodity prices. This proposal only applies to borrower countries. The proposal is to link the terms of the loan to the price of the commodity itself rather than to foreign currencies, or even local currency. This allows matching revenues and debt service obligations and, in turn, it may prevent some crises. This is an old idea, but why has it not been tried? To answer this, we need to figure out who would buy these bonds. The natural customers are firms that want commodity exposure (i.e., airlines, power utilities, etc.), but these firms do not want the country credit risk. That is the problem. The solution is for multilateral development banks (MDBs) to intermediate these instruments. These instruments may provide opportunities to these organizations to lend while responding to some of the market needs.

⁶ Moreover, for some commodities, derivatives contracts (forwards, futures) may be unavailable at long horizons.

Idea 3: Adopt institutions to achieve counter-cyclical fiscal policy. Doing this would allow commodity-exporters to hedge against volatility coming from capital flows. The quality of institutions varies across countries and time, and usually, we can associate good quality institutions to countercyclical fiscal policy. Good examples of this at opposite ends of the spectrum are Australia and Venezuela. In the middle of these two countries is Chile. Chile improved the quality of fiscal institutions and simultaneously reduced the procyclicality of fiscal policy.

What kind of institutions could help? Not budget rules, because most of the time these will not work, and when they do, they do not address the presence biases in official forecasts, especially the overly optimistic ones (which usually tend to be statistically significant). In addition, these forecasts tend to be worse in booms and at longer year horizons. Thus, the fiscal authorities may be misled into adopting a procyclical scheme: if the boom is forecast to last indefinitely, there is no apparent need to retrench. What is the solution?

Chile provides an example of good institutions. A key feature of the Chilean case was the delegation to independent committees of the responsibility to estimate the main macro variables (the only non-optimistic country in the region).

Idea 4: Adopt a monetary policy regime that can accommodate terms of trade shocks. The conventional wisdom is that when there are terms of trade shocks, the exchange rate should be able to accommodate them. Should commodity exporters float? Empirical evidence suggests that this is the right thing to do. It is important to note that a floating exchange rate does make a difference. Nonetheless, central banks still need a nominal anchor to maintain transparency and credibility. Among possible anchors we have exchange rate, M1, and CPI (inflation targeting), all of which prevent the accommodation of terms of trade shocks. But there are some candidates for nominal anchor that would facilitate the accommodation of trade shocks: i) targeting an index of product prices (PPT), ii) targeting nominal GDP (NGDP) or iii) adding the export commodity to a currency basket peg. This last target might get the best of both worlds: it is precise and transparent on a daily basis, and at the same time it is sustainable in the face of shocks.

7. Conference Conclusions

The analysis of external account sustainability is very much work in progress. The literature does not provide definitive answers to relevant policy questions such as i) when should countries worry about the current account balance? ii) what are the optimal policies to smooth external

adjustments? or iii) when has a country reached a level of net foreign liabilities that is not sustainable?

These questions and others were discussed throughout the IDB and Banco de la República conference. Perhaps there are good reasons for the scarcity of answers: it may well be the case that these policy-relevant questions do not have unique answers. Yet policymakers need to act even if there is no clear guidance from theory. This suggests that in the realm of external sustainability analysis, policy is well ahead of theory.

What has practice taught us?

- There are toolkits available to policymakers that permit assessing certain dimensions of sustainability of external accounts' very much in the spirit of traditional debt sustainability analysis.
- Monetary policy faces trade-offs that can reduce the effectiveness of changes in policy interest rates as a tool for dealing with external shocks. However, monetary policy can be complemented with macroprudential policies to support external accounts' sustainability.
- Fiscal policy matters for external accounts' sustainability. In particular, the degree of cyclicity of the fiscal policy stance affects a country's vulnerability to external shocks.
- It is important to monitor specific economic sectors, and not simply the aggregate macroeconomic flows. Usually risks build up in specific sectors and go unnoticed in aggregate data.
- There is a need to increase financial markets' development to provide a larger array of hedging instruments for countries. In the face of external shocks that typically beset Latin American countries (for example, terms of trade shocks), the lack of hedging instruments increases countries' vulnerability.

This workshop was a first step in the direction of improving the understanding of external sustainability issues. We hope that it sparks a necessary debate amongst policymakers, academics and practitioners on this important policy topic.

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