

Foreword

Concerns over the major challenges the international monetary and financial system currently faces and the attendant debate on the policy-related and academic facets of the international financial architecture have arisen from the lessons imparted by the financial crises of recent years and from the need to redefine the international financial community's strategies and strengthen crisis-prevention mechanisms. A new landmark in this connection has been the international conference *Dollars, Debt and Deficits: Sixty years after Bretton Woods*, which took place at the Banco de España headquarters on 14-15 June 2004. The conference was jointly organized by the Banco de España and the International Monetary Fund (IMF).

The conference commemorated the 60th anniversary of the Bretton Woods meetings in July 1944. These meetings were one of the most significant events for the world economy in the last century and gave rise to the birth of an economic, monetary and financial system that has played a crucial role in promoting economic and financial stability, improving global welfare, and alleviating poverty. Representatives from 45 countries met at Bretton Woods against the backdrop of a world economy devastated by war and marked by protectionist trade policies and unstable exchange rates. The foundations were laid there for a stable framework of economic cooperation and an international financial and monetary system, and two institutions which have proved pivotal for the attainment of these goals were created: the IMF and the International Bank for Reconstruction and Development, later the World Bank.

Spain's growing ties with the Bretton Woods institutions reached a high in autumn 1994 when Madrid hosted the IMF/World Bank annual meetings, coinciding with the 50th anniversary of the agreements. Marking another pinnacle was the IMF's obliging acceptance of the proposal to commemorate the 60th anniversary with the organization of an international conference at the Banco de España. Significantly, this has been one of the few occasions on which the IMF has decided to hold a meeting of this nature outside its Washington headquarters.

Conference preparations were set in train in December 2003, when the co-organizers made a call for papers to the academic community for contributions on economic development, policy measures and implications of debt sustainability, exchange rates and global imbalance in the capital account, debt and exchange rate crises, crisis-resolution strategies, the relationship between the adopted exchange rate regime and economic development, the link between fiscal development and exchange rate regimes, and regional integration and the main international currencies. The selection of contributions from among those received was by a committee made up of representatives from the IMF and the Banco de España. The committee was pleasantly surprised by the number and quality of the contributions submitted, ten of which were finally chosen. For the session chairs, discussants and expert panels, prestigious academics and expert staff from central banks, international agencies and economic research institutes were called upon. The outcome was a high-quality program that

generated notable expectations about the conference, expectations which were more than fulfilled thanks to the calibre of the participants and the results of the debates. Among conference speakers and participants, a significant total of 27 countries were represented.

The conference was therefore an excellent opportunity to reflect on the major challenges currently facing the international monetary and financial system and on the future role of the Bretton Woods institutions. It has provided for better understanding of the development of and changes in the international financial architecture and has helped offer a perspective as to how a global response should be designed in the future to avert the perverse effects of crises on the world economy. The conference also allowed a fruitful exchange of views on exchange rate fluctuations in an increasingly integrated world economy, the consequences of political uncertainty and other issues relating to exchange rates, and the term structure of interest rates and the sustainability of public debt.

The main contributions and debates turned on the dynamics of international disequilibria, such as the US external deficit, the effects of exchange rate fluctuations, the impact of uncertainty on public and private external debt, the role of the IMF and of international financial institutions in reducing emerging economies' foreign currency financing needs, and the prospects for the international financial architecture in light of the emergence of new international lending instruments and mechanisms.

In sum, the tight but stimulating conference agenda highlighted once again the need for national authorities and international financial institutions to coordinate their work in areas of common interest, harnessing their experience and comparative advantages, and providing the degree of technical rigour needed to address global financial problems.

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Introduction

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In their opening remarks given to the Conference, Rodrigo Rato, Pedro Solbes and Jaime Caruana reviewed the history and future challenges of the IMF sixty years after its creation. They emphasize the role of the IMF in monitoring the financial system, and in preventing and managing financial crises, stressing the importance of coordination between international financial institutions (IFIs), national authorities, central banks, and supervisory agencies. The main discussions gathered in this book focus on issues related to debt, deficits, exchange rates, and the international financial architecture, with authors underscoring the importance of these topics for the future configuration of the international monetary system.

Block I: Global Imbalances, Exchange Rate Issues, and Debt

The dynamics of global imbalances, with special attention to the US and China, is the first topic of debate in this book. The paper by Michael Dooley, David Folkerts-Landau, and Peter Garber outlines the process for a smooth adjustment of global imbalances, especially in China, in contrast with the alternative scenario of a sudden and disorderly exchange and interest rate correction.

The key hypothesis at the heart of their prediction of an orderly adjustment is that periphery governments (in particular, China) will gradually adjust their policies before the onset of speculative capital flows. Financial policies in these countries are seen as a component of a more general portfolio management policy with the objective of creating an efficient domestic capital stock at the end of the process. In this paper's view, intervention in financial markets is an important part of their development strategy, and thus it will continue to be large and persistent enough to generate predictable deviations of exchange rates and nominal wages from normal cyclical patterns.

In particular, in the case of China, a gradual adjustment of real wages through inflation and nominal exchange rate targeting will allow China to attain two main objectives: (i) absorb 200 million rural workers into the industrial sector, which will ease political pressures and increase those workers' productivity, and (ii) attain an efficient capital stock at the end of the adjustment period, so that China can be competitive in international markets without the need of distorted prices.

The challenge of absorbing these vast quantities of labor in China is to set up a sharing of the benefits with the country importing an increasing flow of Chinese goods (e.g., the US), as this "beggar-thy-neighbor" policy might disrupt the importing

country's labor market. A crucial element, therefore, is the depression of real wages in China and therefore an increase in the returns of foreign capital directly invested there. Over time, these returns on investment would converge to normal levels, at the same time as the Chinese real wage increases and the pool of rural labor is successfully transferred into the industrial sector. To this aim, financial repression and capital controls are seen as crucial by the authors, because in order to control the real wage the government needs to control the rate of inflation and the nominal exchange rate, and that requires breaking the link between domestic and international interest rates.

On a different front, Giancarlo Corsetti and Panagiotis Konstantinou offer support to the so-called intertemporal approach to the current account. This approach has two basic predictions, which the authors confirm using US data. First, a temporary positive shock to output should, on average, improve the current account. That is, consumption should not increase as much as the temporary increase in output, therefore creating a (temporary) current account surplus, which for the US seems to last around 10 years after the shock. Second, a permanent positive shock to productivity would tend to generate a current account deficit, as consumption would tend to increase more than with a temporary shock. A permanent shock in productivity would also tend to raise the return on investment in the US above world levels, thus attracting capital from abroad. In the US data, a permanent increase in productivity tends to generate an increasing current account deficit, which starts to close gradually after one year, reaching balance eight years after the initial shock.

Philip Lane and Gian Maria Milesi-Ferretti explore the interconnections between financial globalization and exchange rates. In particular, they show how exchange rate movements affect the dynamics of net foreign asset positions not only through the traditional effect on trade flows but also through the valuation of inherited stocks of foreign assets and liabilities. Their paper finds that the co-movement of the exchange rate and the return on financial assets is crucial to understand valuation effects. In theory, the impact of exchange rate depreciations depend on: (i) the level of gross holdings of foreign assets and liabilities, in addition to their net position, as their rates of return might respond differently to exchange rate movements; (ii) the currency composition of foreign assets and liabilities (for instance, a depreciation raises the domestic currency payments on foreign, dollar-denominated debt); and (iii) the maturity (short- versus long-term) and composition mix (equity, FDI and debt) of a country's assets and liabilities, as the sensitivity of rates of return to exchange rate movements might be different across investment categories and maturities.

Lane and Milesi-Ferretti present empirical results pointing to exchange rate movements as important determinants of rates of return, which gives support to the valuation channel described before. Furthermore, the composition of the international balance sheet is important for valuation effects, since the sensitivity of returns to exchange rates varies across investment categories. For emerging countries, the relation between domestic currency rates of return and movements in exchange rates is quite strong, as would be expected since those countries are, in general, unable to borrow or lend in domestic currency.

The idea that balance sheet effects are relevant for emerging economies is also the main message of the paper by Juan C. Berganza and Alicia García Herrero. For a

sample of 27 emerging economies, they find evidence that real exchange rate depreciations increase a country's risk premium. In particular, the analysis shows that: (i) large real exchange depreciations increase a country's risk premium, whereas a real appreciation does not reduce it significantly; (ii) exchange rate movements affect country risk mainly through the sudden increase in the stock of external debt and domestic dollar-denominated debt after a real depreciation; (iii) the increase in export competitiveness following a depreciation does not outweigh the detrimental impact of balance sheets outlined before; and (iv) fixed exchange rate regimes appear to amplify the negative impact of balance sheet effects on the risk premium. These results highlight that countries with small trade openness, large financial imperfections and pegged exchange rate regimes should worry most about large real exchange rate depreciations. Given that these three characteristics can be influenced by economic authorities, there is a clear role for policy action to mitigate the problem.

Emerging markets seem to have difficulties borrowing in their own currency, which leads to the dollarization of their liabilities. The last two papers in the first block analyze different implications of this fact for emerging economies, focusing on why these countries cannot borrow as much as developed economies and why they disproportionately borrow at short maturities. Enrique Mendoza and Marcelo Oviedo explicitly introduce the effect of uncertainty on short- and long-run forward-looking measures of sustainable public debt. This effect is crucial in the analysis of debt sustainability for emerging economies, especially after considering three stylized facts: (i) countries with less variation in their ratios of public revenues to GDP support, on average, higher ratios of debt to output; (ii) countries with less variation in GDP tend to support higher average debt to output ratios; and (iii) emerging economies display significantly lower variation in public revenues and larger fluctuations in economic activity than industrial countries. In their model, governments' difficulties implied by low levels of public expenditure lead them to impose "natural debt limit" (NDL) on themselves that is directly related to the worst-case-scenario for public finances: the lowest possible level of public revenues and the minimum, indispensable level of expenditure. If the government borrows above the NDL, it exposes itself to the risk of lowering expenditures to extremely low and suboptimal levels.

Applying the model to the Mexican economy, the authors show the importance of uncertainty, financial imperfections and the dollarization of liabilities for the determination of sustainable debt levels. In particular, Mendoza and Oviedo find that real exchange rate fluctuations undermine a country's fiscal position. They also find that the long-run sustainable debt ratio is lower for (i) a higher level of a government's "basic needs" expenditure—because of the required slack for additional borrowing in case of a succession of years of low tax revenues; and (ii) higher variability of adverse shocks, as it reduces the ability to service debt in the worst scenarios.

Matthieu Bussière, Marcel Fratzscher and Winfried Koeniger present a theoretical model that tries to explain the disproportionately high level of liabilities in the form of short-term debt (debt maturity mismatch) observed in most emerging economies. In their model, a situation where liabilities are mostly denominated in dollars and assets are denominated in domestic currency (a balance sheet currency mismatch) might in turn create and worsen a maturity mismatch. As in the previous

paper, the basic mechanism builds on the effect of uncertainty. Solvency problems tend to tilt financing toward short-term debt: a longer horizon increases uncertainty, and therefore it lowers the amount of long-term lending that investors are willing to provide. In turn, a larger share of short-term debt increases the variability of output, as there is the risk that part of that short-term debt would not be rolled over during bad times, thus affecting production.

The authors also provide empirical evidence that the effects of the variability of the real exchange rate on the level of debt and its maturity composition and on the variability of growth for emerging economies are broadly consistent with the model. In particular, they find that (i) higher exchange rate variability is associated with lower total debt and a higher share of short-term debt (maturity mismatch); (ii) larger political risk is linked to higher short term debt; and (iii) higher maturity mismatch and higher political and economic risk are linked to higher variability of growth rates.

Comments by Daniel Cohen focus first on the difference found by Lane and Milesi-Ferretti between two types of countries: those with big capital inflows and outflows (like China and Taiwan), and those with only big inflows, but no outflows (like most of Latin America). He interprets the first case as a good signal, reflecting countries' ongoing process of diversification of risk; whereas he acknowledges that future research should also focus on why the second group of countries seems unable to generate those bilateral flows. Regarding the relevance of balance sheet effects, he agrees with Berganza and García-Herrero on the importance of taking into account the link between exchange rate depreciations and the increase in sovereign risk, although he expresses reservations about the relatively big size of the effect found in the paper.

Closing this first block, Stanley Fischer and Malcolm Knight address the correction of external imbalances—mainly the US external deficit—and discuss the continuation of foreign reserve accumulation in East Asian countries. They both share an optimistic view of the correction of global imbalances, with a high likelihood of avoiding a hard landing, although they also recognize that the needed correction will require a fiscal consolidation in the US and might end up hindering the dynamism of the global economy. They also agree that it is very unlikely that East Asian countries will continue the pace of foreign reserve accumulation they have sustained until now.

Fischer, in particular, points out that the main global imbalances correspond to the US current account deficit, about half of which can be explained by Asia in general and China in particular. Although there seems to be an implicit strategy from some Asian countries to build up foreign exchange reserves to avoid speculative attacks like those at the end of the 1990s, he also acknowledges that it is hard to see Japan and China continuing the process of reserve accumulation at the current pace. He reckons that if the process of reserve accumulation in Asia slows down, a US current account deficit of the order of 2 to 3.5 percent of GDP seems sustainable, and in order to achieve those levels, the two possible channels are lower growth (through fiscal adjustment) and exchange rate movements, especially against Asian currencies. According to his view, this does not necessarily mean a hard landing for the US. He also points out that a big change in exchange rates need not be disruptive, as the recent movements of the euro/dollar exchange rate suggest. Finally, he envisions a process whereby, in the very long run, the world will turn into regional currency blocs

(probably starting in Asia) with a tendency towards a global currency, where current account deficits will not matter much, as they do not matter now for countries inside the euro area, for example.

Knight, for his part, concentrates on the similarities and differences between the current US external imbalance and that of the 1980s. He agrees with Fischer that the current US external deficit now is a reflection of surpluses in developing countries, as opposed to the 1980s, when those surpluses were mainly in developed regions. As it happened between 1985 and 1987, the dollar has also depreciated in effective terms in the last few months. He points out that in the 1980s, that depreciation took some time to effect an improvement of the US current account. In his view, the experience of the 1980s suggests that the adjustment to reduce the large US current account will take place without very large disruptions, because the US is at the center of the international financial system, and therefore can finance its external and fiscal deficits in domestic currency, which means that the effect of the adjustment will be spread out internationally, and not be confined to the US. But this also suggests that without a fiscal consolidation, closing the external imbalance will need a large exchange rate correction. He also mentions three aspects of the current situation that are different from the previous exchange rate correction in the 1980s, which make adjustment harder: (i) the emergence of Asia and the difficulty it imposes on the US's need to shift resources to an intensely competitive traded goods sector; (ii) the possibility that the next adjustment could combine both recession and inflation, as prices of commodities have increased because of high demand and low investment in productive capacity; and (iii) the lack of growth in other developed areas, as opposed to the 1980s, when Japan was a clear source of growth.

Block II: International Financial Architecture

A paper co-authored by Ralph Chami, Sunil Sharma and Ilhyock Shim examines the role of the IMF as a coinsurance arrangement. In particular the paper addresses (i) whether an IMF-like coinsurance arrangement is beneficial for the global financial system, and (ii) how should a contract between a country and the IMF be structured in order to create the right incentives. In particular, should the IMF commit to a contract before the onset of a crisis, or should the contractual details be decided after the country is in crisis?

The authors argue that the existence of a coinsurance arrangement between countries increases their welfare. Furthermore, the best option is the formation of an IMF-like centralized institution to function as a delegated monitor and to provide liquidity for temporary balance of payment problems.

The key question is whether an ex-ante agreement on the IMF loan contracts between the IMF and the member country designed prior to the advent of a crisis is preferable to an ex-post contract designed once a crisis has already erupted. The paper demonstrates that in the presence of information asymmetries and given the mandate of the IMF to safeguard its own resources and to care about the welfare of borrowing countries, the IMF should pre-commit to a lending contract. Such a pre-commitment elicits the right policy effort from countries to prevent crises and recover from them.

This theoretical exercise also supports the idea that discretion and renegotiations once a crisis has erupted should be constrained in IMF operations to provide countries the right incentives for crisis prevention and crisis resolution.

Barry Eichengreen, Kenneth Kletzer and Ashoka Mody contribute to the debate on the capacity of the IMF to boost private capital flows (acting as a catalyst) in bank and bond markets. Their paper concentrates on two questions: (i) is it possible to find a stronger catalytic effect of the IMF on bond issues than on bank loans?, and (ii) does a country's level of indebtedness affect the capacity of the IMF to catalyze capital flows?

The departing hypothesis is that the IMF is more likely to foster access to bond markets than to bank lending, since banks already perform some sort of monitoring function, which is much weaker in bond markets. Thus, the presence of an IMF program might redress the monitoring and coordination disadvantages of bond markets vis-à-vis bank lending. Indeed, their empirical exercise finds support for this insight. First, the presence of an IMF program has a stronger effect on the bond market than on bank lending. Second, a country's level of solvency appears to have an impact on the ability of an IMF program to increase access to bond markets. The IMF presence, rather than its lending, appears to lower bond spreads when countries are not yet insolvent but are under a risk of liquidity crisis. Beyond a debt ratio of 65 to 70 percent, it is the size of IMF lending, rather than its mere presence, which seems to contribute to lower spreads and to improve market access. Finally, they also find that precautionary programs—those in which, in principle, the borrowing country declares its intention not to withdraw the funds made available by the IMF—are associated with lower borrowing costs in both loan and bond markets. The results of the analysis suggest that an IMF-supported program is likely to have a stronger catalytic effect when a sizable share of the country's external debt takes the form of bonds, and when countries are not yet insolvent but only face a risk of liquidity crisis. These facts should therefore be taken into account when designing such a program.

Financial dollarization, and the associated financial fragility it introduces into emerging economies, has become a crucial issue in the policy debate in those countries and has shifted the stance towards a more proactive dedollarization. This is the starting point of Eduardo Levy-Yeyati's paper on the dedollarization of multilateral credit.

In developing countries, as a consequence of the high nominal volatility and credit risk, a large part of domestic savings moves abroad. This generates a heavy dependence on foreign credit and specially on multilateral funding from international financial institutions. This, in turn, becomes one of the most important sources of dollarization in emerging economies. Levy-Yeyati discusses theoretical and practical arguments in favor and against IFIs lending in local currency and concluded that IFIs are natural candidates to launch investment-grade, local-currency credit markets. As opposed to existing proposals, he argues that an initiative of this kind should and could rely on the demand from emerging markets residents searching for local currency assets that minimize the volatility of returns, and which are, at the same time, reluctant to take on sovereign risk.

According to his view, the intermediation of IFIs as a first step towards the dedollarization of developing countries' external debt has several advantages: (i) it would voluntarily dedollarize part of a country's liabilities with no cost either for the

local investor or for the IFIs; (ii) it would start an international market in local CPI-indexed bonds that can be used in the future by domestic borrowers as a source of financing that is free from real exchange rate and sovereign risk;; and (iii) it could eventually attract funds from non-residents willing to hold a speculative position in the local currency, or in search for currency diversification, without assuming that country's sovereign risk.

In the context of recent developments in the adoption of collective action clauses (CACs)—provisions introduced in sovereign bond contracts to facilitate the restructuring of debt in the case of crisis, especially in those jurisdictions where they had not been traditionally used—Andrew G. Haldane, Adrian Penalver, Victoria Saporta and Hyun Song Shin present a paper which adds to the debate on the determination of optimal voting thresholds for collective actions and on the convenience of standardizing these clauses across issuing countries.

This paper analyzes the factors determining the optimal threshold and the reasons why different issuers may choose different thresholds. Despite the assurance that a lower threshold may provide to the debtor, there are disadvantages in following this strategy. A lower threshold benefits debtors by increasing its ex-post payout in the event of a crisis. However, it also means higher ex-ante interest charges. Therefore, a lower threshold might not be preferable since it increases the likelihood of creditors “running for the door” and, consequently, the probability of liquidity crisis. The choice of thresholds can depend on the degree of creditor risk aversion and debtor creditworthiness. In particular, for risk-averse creditors, it may be more convenient to choose lower thresholds, thereby reinforcing the insurance role of CACs. On the other hand, the more creditworthy is the debtor the lower is the tolerable CAC threshold. This occurs because creditors considering a rollover require increasingly more compensation as creditworthiness declines. Thus, there might be costs to encourage threshold uniformity.

Finally, the authors point out that their model nests both liquidity runs and debt restructurings after a solvency crisis. They argue that the tools for dealing with liquidity and solvency crisis—which had typically been treated separately—cannot and should not be considered in isolation. The interaction and spillovers between them need to be weighted carefully when designing both sets of policy. In particular, how debtors resolve financial crises affect the likelihood of one.

Lorenzo Bini-Smaghi, commenting on the paper by Chami, Sharma and Shim, points at time inconsistency as the main problem in IMF programs, especially in those that involve big emerging countries. This leads to the question of enforcement of IMF rules—mainly the limits established for access to Fund's resources—and how to keep them credible, even if occasionally they have to be violated. In his view, private agents demand a more strict application of rules if IMF credibility is to be safeguarded. He also raises the issue of the potential erosion of the preferred creditor status of the IMF. Regarding the paper by Eichengreen, Kletzer and Mody, Bini-Smaghi highlights the importance of IMF surveillance and the need to strengthen it both in countries under an IMF program and in non-program scenarios. As main policy implications, he mentions the key role of surveillance in highly indebted countries and the possibility of implementing a non-borrowing facility as a means to provide countries with high

frequency monitoring without increasing IMF exposure. This non-borrowing facility would consist of a voluntary arrangement between the IMF and a country, with similar characteristics to those of a conventional Fund-supported program (in terms of conditionality, standards, IMF Board involvement, etc) but without lending.

John Murray comments on the issue of international lending by posing some important questions. Regarding Levy-Yeyati's proposal, he expresses doubts regarding (i) the potential of measures put forward in promoting local markets in local currency, (ii) the possibility of stripping away funds from domestic markets instead of attracting offshore savings, and (iii) the real attractiveness of the new instruments to be issued for residents with offshore savings. As a more general comment, he considers whether dollarization is always such a bad thing. On the paper by Haldane et al., Murray casts doubts on the real relevance of CAC thresholds for investors, based on the recent experience of the use of different thresholds. As a future line of research, he also points out that there are other features of CACs which also need to be studied in depth.

Guillermo Ortiz, commenting on the future of the international financial architecture, emphasizes the importance of crisis prevention and resolution. In the area of prevention he especially highlights the usefulness of transparency and of the documents jointly prepared by the IMF and the World Bank to strengthen countries' economies, such as the Reports on the Observance of Standards and Codes (ROSC) and the Financial Sector Assessment Programs (FSAP). He also regrets the passing of the contingent credit line (CCL), a former IMF facility aimed at providing insurance to well-performing countries, and proposes its revival. Regarding crisis resolution, he supports the IMF's work. Furthermore, he expresses his satisfaction at the abandonment of the statutory sovereign debt restructuring mechanism proposed by Anne Krueger of the IMF. He is also confident of the usefulness of CACs, and cast doubts about the practical consequences of a code of good conduct for sovereign debt restructuring.

Finally, this book includes the addresses by Agustin Carstens and Jean-Claude Trichet to participants of the conference. Trichet reviews the changes of the international financial architecture over the recent years. In the context of a changing environment he highlights four key areas: (i) the strengthening of the international institutional set-up that has taken place since the 1990's; (ii) the significant progress achieved in transparency and in the promotion of best practices; (iii) the improvement of financial regulation in industrialized countries, in which important developments have been achieved but still further work is needed; and (iv) the importance of crisis prevention and resolution initiatives, and the need to draw lessons from the experience of the last decade. Carstens' remarks focus on the factors that have to be understood in order to improve the policy response to financial crises. First, he underlines the complexities involved in the design of these responses in the midst of a crisis, associated mainly with high levels of uncertainty and volatility. Second, he stresses the difficult tradeoffs faced by the policymaker, not only in the economic field but also on political grounds. The persistence of vulnerabilities after overcoming the crisis and the resulting need for continued reforms constitute the third part of his speech. Finally, Carstens referred to the role of the Fund in crisis resolution and the ways in which this institution is working to reduce the frequency and severity of crises.