

Introduction

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Fiscal policy makers have had to operate in an extraordinarily challenging environment over the last few years. First, they were confronted with an exceptionally large output shock, the biggest since the 1930s. Second, reflecting in large part the size of the shock but also the relatively weak fiscal position in many advanced economies in the period before the financial crisis, they quickly found their policy options constrained by spiraling deficits and a rapid buildup of public debt, which rose in some advanced economies to dizzying levels not seen since the end of the Second World War. Before long, policy options were further constrained by a loss of confidence in the ability of some countries to pay back their debts, as evidenced by a return to risk premia that had not been seen in advanced economies for many years. And throughout this period, the task for policy makers was further complicated by the need for fiscal policy to shoulder an unusually large share of the burden in responding to developments, with various factors conspiring to limit the capacity of monetary policy to deal with the shock.

In these unprecedented circumstances, the International Monetary Fund (IMF) advocated a policy response that was, for it, likewise unprecedented. At the outset of the crisis, in 2008, the IMF for the first time in its history called for a global fiscal expansion across all countries able to afford it, seemingly abandoning its long-held position that monetary policy, not fiscal policy, was the appropriate response to a deceleration in economic activity. Three considerations lay behind this change of view about the role of fiscal policy.

- The magnitude of the shock to the world economy was deemed so large that without a coordinated fiscal support, the world economy would not merely sink into recession but plunge into depression.
- While the recession had originated in a house-price boom and misbehavior in the financial sector, it soon evolved into a demand-deficiency recession. Lack of demand, abetted by uncertainty and rising unemployment, was driving output further and further down. Keynes's *General Theory* was the relevant textbook.

- With credit markets dysfunctional and private sector overhang in several advanced economies, the monetary lever ceased to work as well: even at close-to-zero money market rates, private sector demand remained weak.

As the global economy gradually improved and signs of tensions in some government paper markets became apparent, a process of fiscal adjustment started in 2010, first in emerging economies and then in advanced economies. Here, again, the IMF's views on how fiscal adjustment should be implemented reflected the specific challenges of the new situation. The Fund stressed that the speed of adjustment should vary across countries, reflecting, in particular, (1) the state of their public finances (countries with larger imbalances had to move more quickly), (2) market pressures (because of lower credibility, countries under market pressure had to move faster), and (3) the state of the economy and the impact that fiscal adjustment would have on it. Altogether, in countries that were not facing market pressures and had adopted credible medium-term fiscal adjustment plans, the IMF has recommended proceeding with deficit reduction at a steady, gradual pace, thus taking an intermediate position between the fiscal doves (who have argued that fiscal adjustment could be postponed altogether to provide continued support to demand) and the fiscal hawks (who have held that a front-loaded adjustment was needed to prevent a fiscal crisis or even—in some versions—to provide a burst of confidence that would jolt the private sector back to life). Two factors underpinned the Fund's emphasis on gradualism:

- First, as in the current environment, multipliers are likely to be high when output is demand-determined and the transmission mechanism of monetary policy is weak; indeed, in principle, it would be better to postpone adjustment to a time when private-sector demand is too strong, not too weak. However, a full postponement would not be credible with financial markets, which could eventually lose faith in promises that they would be repaid in better days (especially given the failure of many advanced economies to tighten fiscal policy during the “better days” that preceded the current crisis).
- Second, there is risk of too much of a good thing: fiscal adjustment leading to significant output deceleration can be counterproductive as markets, alarmed about the impact that continued falls in GDP would have on a country's creditworthiness, could push interest rates higher not lower, as confirmed by some econometric evidence on interest rate determinants (Cottarelli and Jaramillo 2012).

Of course, not all of the Fund's policy prescription is new. There is still a role for monetary policy, with the IMF arguing that fiscal adjustment should be accompanied by continued monetary relaxation, to help cushion the negative impact that even

gradual deficit reduction will have on growth. Indeed, fiscal dominance should be avoided: relaxed monetary policy is not a substitute for fiscal adjustment. And the Fund continues to encourage countries to undertake structural reforms that boost potential output over the medium term, as strong growth has shown to greatly facilitate fiscal consolidation (World Economic Outlook, October 2012, IMF).

Unfortunately, the crisis in advanced economies is not yet over, and it is therefore too early to write its definitive history. Fiscal deficits and debt ratios remain high in many advanced economies, while output growth is still weak and unemployment in many countries at unacceptable levels. It is not, however, too early to begin drawing from the fiscal policy experience of the last few years, to help inform policy makers as they face the continued challenges from the crisis. This book comprises five parts, each containing several chapters. After part I provides the overarching analytical framework for the book, part II continues with a chronological review of the buildup of fiscal vulnerabilities that started well before the crisis. Part III presents the policy response during the crisis, and part IV the outlook and policy challenges ahead. Part V concludes with lessons learned and suggestions about the way forward.

Part I Assessing Fiscal Sustainability: An Analytical Framework

The five chapters in part I provide the analytical basis to the remainder of the book. Chapter 1 by Carlo Cottarelli develops a framework of rollover risk that integrates three dimensions: (1) the baseline projections of fiscal variables (stock and flow variables, asset and liability structure, and long-term age-related fiscal spending), (2) fiscal risks surrounding the baseline scenario (macroeconomic and fiscal policy shocks), and (3) other salient variables (nonfiscal variables and risk appetite). This framework is then used to discuss what triggers fiscal crises.

Chapter 2 by Carlo Cottarelli and Julio Escolano develops various practical methods to assess the sustainability of fiscal policies. Broadly, they fall into three categories: (1) gap measures based on the difference between the actual value of a fiscal magnitude, such as the primary balance, and the notional value that would meet specific criteria, such as hitting a target debt ratio in a specified time or satisfying the intertemporal budget constraint (IBC) of the government; (2) estimates of fiscal policy reaction functions (FPRF) that allow testing the consistency of these FPRFs with the IBC condition or the absence of Ponzi-game explosive debt dynamics; and (3) fiscal vulnerability indicators that can flag the likelihood of a future fiscal crisis or stress episode when prespecified threshold values are crossed (typically based on the past predictive power of the indicators). Finally, the chapter presents extensions of basic debt dynamics methodology for the treatment of government assets and the dynamics of net debt, and the methodological adjustments necessary to deal with foreign currency-denominated and inflation-indexed debt.

Julio Escolano in chapter 3 discusses the behavior of the interest-rate growth differential (IRGD), an essential variable in the dynamics of the public debt-to-GDP ratio. Economic growth theory suggests that the IRGD should be positive in economies on, or near, their balanced growth path. In advanced economies the IRGD has been indeed generally positive, close to 1 percentage point on average in the twenty years preceding the crisis. Any increase in the IRGD raises the primary balance required to stabilize the debt. In contrast, among emerging and developing economies, negative IRGDs predominate, often well below -10 percentage points. As a result many of these economies have been able to maintain a stable or a downward trend in their debt ratios despite persistent large primary deficits. The policy room provided by strongly negative IRGDs may, however, contract over time as a consequence of financial development and globalization. The chapter argues that negative IRGDs are not rooted in a long-term income catch-up process but in negative real interest rates brought about by financial repression that stunts economic growth.

Chapter 4 by Li Zeng first reviews some stylized facts about the primary fiscal balance and finds that while achieving a large primary fiscal surplus is not unusual, sustaining it over an extended period is quite uncommon. The chapter then estimates the empirical relationship between the primary fiscal balance and its underlying determinants, using both country fixed-effect and dynamic-panel data methods. Real economic growth is found to have a significant positive impact on the primary fiscal balance. There is also evidence that countries tend to run higher primary fiscal balances when faced with higher debt-to-GDP ratios. These findings are quite robust to sample selection, various model specifications, and the interest rate and forward-looking growth measures used in the regressions. Evidence is lacking, however, to support the conjecture that countries act more aggressively on fiscal consolidation when the public debt exceeds a certain threshold. Finally, the chapter illustrates how its empirical findings could be applied to predict a country's primary fiscal balance on the basis of its economic fundamentals. The predicted primary fiscal balance benchmark could be a helpful input in assessing whether, based on historical experience, government consolidation plans are realistic.

The fifth and last chapter in part I by Manmohan Kumar and Jaejoon Woo empirically investigates the extent to which large public debts will adversely impact investment, productivity, and growth, a critical question in the current environment of high debts in many advanced economies. In doing so, it pays particular attention to a variety of methodological issues, including reverse causality and simultaneity bias. The results suggest an inverse relationship between initial debt and subsequent growth, controlling for other determinants of growth. On average, a 10 percentage point increase in the initial debt-to-GDP ratio is associated over the medium to long run with a slowdown in real per capita GDP growth of around 0.2 percentage points per year, with the impact somewhat smaller in advanced economies than in

emerging market economies. Some evidence suggests nonlinearity, with higher levels of initial debt having a proportionately larger negative effect on subsequent growth. Moreover, when a country's economic and financial position vis-à-vis the rest of the world is weak or the share of its foreign-currency denominated debt is large, the adverse impact of initial public debt on subsequent growth tends to be much more pronounced than when these factors are at more moderate levels.

Part II Buildup of Fiscal Vulnerabilities Prior to the Crisis

The four chapters of part II examine when and how fiscal vulnerabilities started to build up prior to the crisis. In doing so, these chapters also put the current crisis in historical perspective. Chapter 6 by Jiri Jonas and Iva Petrova examines the state of fiscal accounts in advanced and emerging economies from the postwar period until the outburst of the 2007 crisis, identifying some early symptoms of fiscal profligacy that eventually degenerated into fiscal stress. These symptoms include a secular upward trend in spending and a tendency to confuse temporary upswings in revenues as structural changes, leading to unanticipated revenue losses and deficit explosion during the crisis. In G7 countries, general government expenditures grew persistently, from 25 percent of GDP in 1950 to 40 percent in the early 1990s. Initially, increasing expenditures were paid for by increasing revenues, but these were eventually accommodated by wider deficits and growing debt. After reaching a postwar low of 35 percent of GDP in the mid-1970s, helped by a negative interest-growth differential, the debt-to-GDP ratio stood at 84 percent by the time the crisis erupted. The reduction in fiscal deficits in advanced economies just before the crisis reflected largely temporary factors: equity prices added about 1.5 percent of GDP to revenues in advanced G20 countries, while housing prices, at their peak prior to the crisis, improved revenues in several EU countries by about 2 percent of GDP. Overall, the underlying fiscal balance in many advanced economies was not as strong as it appeared and reduced the fiscal space to absorb the shock of the crisis. Pre-crisis improvements in the fiscal positions of emerging market economies were generally more robust. Moreover they were helped by lower borrowing costs and, in some cases, by high commodity prices.

Chapter 7 by S. Ali Abbas, Nazim Belhocine, Asmaa El-Ganainy, and Anke Weber takes an even longer view than the previous chapter to analyze the ongoing debt buildup in advanced countries in historical perspective, with a view to identifying significant drivers of debt accumulation and subsequent debt reductions. The findings suggest that the Great Accumulation episode of the 2000s reflected a mix of primary deficits, higher real interest rates, and stock-flow adjustments related to the banking and currency crisis, while unfavorable interest-growth differentials played a major role in the debt accumulation of the Great Depression of the 1930s. For large

debt reductions since 1880, the primary balance did the heavy lifting, except in the post–World War II period, when negative interest-growth differentials in the context of capital controls and financial repression contributed favorably.

Chapter 8 by S. Ali Abbas, Nathaniel Arnold, Petra Dacheva, Mark De Broeck, Lorenzo Forni, Martine Guerguil, and Bruno Versailles focuses on the sovereign debt crisis in the euro area (EA). The chapter's goal is to identify the roots of the EA sovereign debt crisis with particular emphasis on why it affected the EA but not other large advanced economies. The chapter starts by documenting the considerable cross-country heterogeneity in fiscal performance across the EA in the pre-crisis era and identifies specific institutional and market failures that hampered fiscal convergence and amplified vulnerabilities. Deepening intra-EA imbalances and rising fiscal vulnerabilities in the first decade of the euro had planted the seeds of the crisis. When it broke, delays in elaborating a regional response undermined confidence in the EA's capacity to act as a policy entity. A concentration on fiscal adjustment, combined with banking sector weaknesses and lagging growth-supporting structural reforms, engendered negative feedback loops among fiscal consolidation, banks' balance sheets, and growth. The consolidation effort was further complicated by the adoption of nominal targets in the context of the EU fiscal framework, which emphasized fiscal policy's procyclical bent. The chapter concludes with observations on lessons learned and on the way forward for the EA.

Chapter 9 by John Norregaard, Aqib Aslam, Dora Benedek, and Thornton Matheson shows that current tax systems distort saving and financing behavior of individuals and firms by providing incentives for higher leverage, risk-taking, and the promotion of complicated financial instruments. Although tax policy did not directly cause the financial crisis, tax distortions increased the exposure to shocks and probably delayed recovery. The chapter discusses the channels through which tax policies may have caused this delay and suggests reform measures that should be considered to eliminate distortions in tax systems and promote economic stability. In particular, the debt bias in corporate finance represents a key tax distortion in most countries. While debt-financing costs are usually deductible from the corporate income tax base, returns on equity are not. This asymmetry provides a tempting incentive for excessive leverage. Similarly the differential tax treatment of capital income across various financial assets encourages risk-taking, including risks associated with complex and opaque financial instruments. Prevalence of low-tax jurisdictions also fosters excessive leverage by providing incentives for tax avoidance. Moreover executive compensations schemes are frequently designed in a way that promotes excessive risk-taking. Finally, favorable tax treatment of homeownership, reflected in elevated housing prices in many countries, contributed to a housing bubble and unsustainable mortgage-based borrowing. Tax reform measures are therefore needed in many countries to mitigate these adverse consequences and to help prevent future

financial distress. Along with growth-friendly revenue mobilization efforts, new financial-sector taxes could be designed to correct existing externalities and to raise revenue.

Part III Management of Fiscal Policy during the Crisis

Part III is devoted to fiscal policy during the crisis. Chapter 10 by Thomas Baunsgaard, Alejandro Guerson, and Kyung-Seol Min analyzes how countries employed activist fiscal policies in response to the crisis. It provides an in-depth analysis of the timing, size, and composition of fiscal stimulus packages in advanced and emerging market economies and discusses issues related to their implementation. Contrary to widespread public belief, the fiscal stimulus was not the main reason for the substantial rise in fiscal deficits and debt ratios. By quantifying the relative contribution of various factors, the chapter finds that a decline in government revenues and, to a lesser extent, government support to the financial sector were the main factors behind the surge in deficits and debt ratios. Stimulus packages were well diversified across various revenue and expenditure instruments and were generally well coordinated, at least in the first phase of the crisis. Although fiscal stimulus packages varied across countries, an econometric analysis shows that these differences were generally consistent with each country's economic fundamentals, including available fiscal space, the severity of the downturn in domestic economic activity, the ability and space to use monetary policy, and the degree of trade openness that dilutes the effect of fiscal stimuli on the domestic economy.

Martine Guerguil, Marcos Poplawski-Ribeiro, and Anna Shabunina discuss in chapter 11 low-income African economies that seem to have been able to escape the procyclical fiscal bias that had plagued them for many decades. This helped mitigate the impact of the global crisis in the region. However, overall fiscal numbers mask two diverging and potentially troubling trends: current spending has been in most cases above budget plans, while capital outlays have been largely below. Empirical analysis suggests that the quality of governance and of budgetary institutions explains a sizable part of the difference between intended and observed current expenditure. In contrast, the under-execution of investment projects seems mostly due to political factors. This implementation gap between current and capital spending casts a shadow over future fiscal space, as the growing weight of not easily reversed current outlays intensifies spending rigidity and likely contributes to the observed drift in deficits even as growth has recovered. Further strengthening of the institutions and processes governing public investment is needed to avoid a return to fiscal procyclicality.

The Great Recession has refocused attention on the effectiveness of fiscal policy as a countercyclical tool and has revived the debate about the size of fiscal

multipliers, the topic of chapter 12 by Aiko Mineshima, Marcos Poplawski-Ribeiro, and Anke Weber. The chapter underscores the continued lack of consensus about the size of fiscal multipliers, which measure the impact of fiscal policy on output. Although there seems to be broad agreement that expansionary fiscal policy has a positive impact on growth, at least in the short term, it is unclear whether fiscal multipliers are larger or smaller than unity. Based on a comprehensive survey of the literature, the chapter concludes that the size of first-year government spending multipliers lies between 0.3 and 1.0 during normal times, with revenue multipliers being significantly smaller. The size of multipliers tends to be influenced by various factors, however, including the state of the economy, monetary policy stance, degree of openness, level of debt, and types of fiscal instruments used. In particular, recent studies, including original work summarized in this chapter, suggest that multipliers could be significantly larger during economic downturns than during economic expansions. The finding has important policy implications for the design of fiscal adjustment plans. In particular, it suggests that when feasible, a gradual adjustment is preferable to a frontloaded one.

Chapter 13 by Mika Kortelainen, Douglas Laxton, and Jack Selody uses the International Monetary Fund's Global Integrated Monetary and Fiscal Model (GIMF) to illustrate the increased effectiveness of expansionary fiscal policy when monetary policy accommodates the shock, such as was the case in the 2008 to 2009 coordinated fiscal expansion. To accomplish this, the authors introduce simple fiscal policy and monetary policy rules into the model to show the dynamics of policy coordination. They also show how features such as financial accelerators affect the dynamics of policy coordination. The chapter examines three scenarios. The first simulates an expansionary fiscal policy when the monetary policy rate has not reached its lower bound and shows that fiscal policy is much more effective when accommodated by monetary policy. The second scenario highlights that even when the policy rate is at its lower bound, an expansionary fiscal policy could be still quite effective if accompanied by unconventional monetary policy easing. Finally, the third scenario illustrates the counterproductive nature of expansionary fiscal policy when markets perceive the debt path to be unsustainable.

Chapter 14 by Ceyla Pazarbasioglu, Uffe Mikkelsen, and Suchitra Kumarapathy examines financial sector support during the crisis with a particular emphasis on the extent to which costs differed across countries. More specifically, it describes the types of central bank and government support provided to the financial sector during the crisis, quantifies the initially pledged and actually utilized government support measures across countries, and compares the costs of current crisis interventions with costs during earlier episodes. The chapter shows that extensive public support has been provided to restore confidence in the financial system. As the crisis unfolds, its fiscal costs remain uncertain, but so far it is evident they have differed widely across countries. Compared to previous crises, governments to date have re-

lied more on containment—through central bank liquidity provision and guarantees of bank liabilities—and less on restructuring banks' assets. This approach has given rise to large contingent liabilities as risks are transferred from private to government balance sheets, but in most cases the approach has limited initial fiscal outlays. Importantly, this approach delays the much needed restructuring of banking and corporate sectors, critical for their viability and profitability. This risks transferring the costs of the crisis into the future and extending the economic downturn.

Chapter 15 by Borja Gracia, Jimmy McHugh, and Tigran Poghosyan assesses the impact of the global crisis on subnational governments (SNGs) using disaggregated state level data for eight large highly decentralized countries—namely Australia, Brazil, Canada, China, Germany, Mexico, Spain, and the United States. The chapter finds that the crisis adversely affected SNGs in advanced countries, primarily through a steep reduction in output, which in turn generated a decline in own revenues. SNGs in emerging economies were less affected as economic activity held up comparatively well. The chapter also examines the short-run policy response of SNGs. In general, SNGs operated countercyclical policies, maintaining and in some cases increasing expenditure levels, compared to the pre-crisis period, owing to transfers from the central government in the context of national stimulus packages. At the same time, there was some limited relaxation of SNG budget rules and borrowing constraints. The crisis exacerbated long-run sustainability challenges for many SNGs. A considerable part of revenue declines was structural. Given the current plans of central governments to withdraw the stimulus packages, SNGs should put in place reforms to tackle the structural gap between the higher post-crisis level of expenditures and permanently lower revenues.

Part IV Post-crisis Fiscal Outlook

Part IV of the book covers the post-crisis fiscal outlook and risks in advanced and emerging economies, highlighting both short- and long-term fiscal challenges and risks to fiscal sustainability. Chapter 16 by Laura Jaramillo and Pablo Lopez-Murphy uses scenario analysis to illustrate the fiscal challenges facing advanced and emerging economies. The financial crisis left many countries, especially advanced economies, with a dangerous combination of high debt and high fiscal deficits. Over the medium term, even as crisis-related measures are unwound, headline deficit-to-GDP ratios are not expected to return to pre-crisis levels without fiscal adjustment measures. Although revenues are expected to recover from their current cyclical weakness, they are not projected to resume their original (pre-crisis) path because of what has been regarded as a permanent loss of potential GDP, a feature of most financial sector crises. Correspondingly, expenditure is expected to remain high in terms of GDP, despite sizable expenditure cuts, owing to a combination of lower expected potential GDP and new spending pressures, including debt servicing costs

and age-related spending. As overall balances are expected to narrow only gradually, debt ratios are expected to remain high over the medium term, especially in several large advanced countries. Debt is expected to take a downward path in emerging economies, supported by relatively strong GDP growth. Nonetheless, underlying this positive outlook for emerging market economies are relatively benign assumptions regarding interest rates and growth trends. Therefore, looking ahead, all countries face important risks that could derail debt reduction. These risks include policy implementation challenges, greater macroeconomic uncertainty—over interest rates, growth, and the exchange rate—and the possibility that large contingent liabilities materialize.

Chapter 17 by Lorenzo Forni and Marialuz Moreno Badia analyzes what the goal of fiscal adjustment should be and the extent to which other nonconventional measures can help in restoring and maintaining market confidence. It argues that despite considerable adjustment, many countries still have a long way to go. Thus it is essential to calibrate the pace of adjustment for the long haul, taking into account the state of the economy and funding pressures. Central banks also have a role to play by implementing supportive monetary policies and ensuring the proper working of credit markets. On the other hand, financial repression (with or without inflation) is unlikely to produce a large payoff as a captive domestic investor base may be difficult to achieve in a globalized world. The privatization of nonfinancial assets promises a somewhat larger potential to reduce the debt burden, although it may be difficult to realize in the short term. Finally, debt restructuring may be unavoidable in some cases, but this could have large costs particularly if public debt is in the hands of domestic residents.

Chapter 18 by Xavier Debrun and Andrea Schaechter examines the *Institutional Reforms and Fiscal Adjustment*. It reviews recent developments in the establishment of institutions specifically aimed at fostering fiscal discipline and counter-cyclicality. The chapter argues that the mixed results obtained with fiscal policy rules in the run-up to the 2008 to 2009 crisis have favored the emergence of a new generation of institutions. First, fiscal rules are now designed to better respond to cyclical output movements and are equipped with explicit enforcement mechanisms. Second, the growing number of independent fiscal councils signals countries' interest in other forms of legitimate constraints on fiscal discretion, involving better operation of checks and balances in the political system and greater awareness by the electorate. Third, these new institutions are backed by public financial management reforms aimed at a stronger medium-term orientation of the budget. While welcome, these developments are no panacea. The implementation of more complex rules raise significant challenges, and experience with fiscal councils remains too limited to distill credible best practice.

In chapter 19 Baoping Shang and Mauricio Soto focus on public spending on pensions and health care; they discuss the rapid growth and projected increase of

these costs, respectively, by 3.5 and 2 percentage points of GDP in advanced and emerging economies over the next two decades. Such increases will add to the already urgent need for fiscal adjustment in many countries. For countries with large projected spending increases and limited fiscal space, the challenge is to contain the growth of public pension and health spending without adversely affecting the social objectives of these programs. The viable options to contain pension spending include curtailing eligibility (e.g., by increasing the retirement age), reducing benefits, or increasing contributions. While all of these options involve apparent trade-offs, increasing the retirement age has many advantages. Containing public health spending requires a mix of macro-level controls, such as imposing budget caps, and micro-level efficiency-enhancing reforms, such as strengthening market mechanisms. For countries where coverage is still limited and with available fiscal space to increase spending, the challenge is to expand coverage while keeping the systems on a fiscally sustainable path. While these countries also need to improve the efficiency of current spending, they could consider providing basic pension and health benefits to the entire population financed by general tax revenues.

In chapter 20 Mika Kortelainen, Douglas Laxton, and Jack Selody examine the general equilibrium model outlined in chapter 13. This chapter illustrates how combining fiscal consolidation with structural reform and coordinated fiscal policy can reduce public-sector indebtedness, encourage growth, and lower global imbalances for all participating countries. On the one hand, fiscal consolidation is typically associated with shrinking current-account deficits and slowing growth. On the other hand, structural and fiscal reform creates the potential for the world economy to grow while rebalancing global demand. The potential for a virtuous circle to arise is illustrated in two parts. First, structural and fiscal reforms are combined with fiscal consolidation in deficit countries to show that even without monetary policy, easing the result of coordinated policy action is positive for participating countries. Then, fiscal consolidation is combined with monetary easing to show that coordinating these actions is positive for the world economy and does not generate inflation in the major developed economies, even in the absence of increased potential growth from structural and fiscal reforms.

Chapter 21 concludes with some policy lessons from the crisis.

Reference

Cottarelli, C., and L. Jaramillo. 2012. Walking hand in hand: Fiscal policy and growth in advanced economies. Working Paper 12/137. International Monetary Fund, Washington, DC. Available via the Internet: <http://www.imf.org/external/pubs/cat/longres.aspx?sk=25946.0>.

