Despite these concerns, I recommend this book highly. HPW identify a significant problem and contribute immensely by providing an estimate of the benefits from improving the skills of our young people. In addition, an economist looking for a new research agenda could find much inspiration in almost every page in this book.

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The Great Recession: Lessons for Central Bankers. JACOB BRAUDE AND OTHERS (EDITORS). Cambridge, MA: The MIT Press, 2013. Pp. xii, 380. \$22.00.

This book is a collection of papers presented at an international conference on *Lessons from the World Financial Crisis*. The topic was the Great Recession (2008-2009). Sponsored by the Bank of Israel, the participants were mainly central bankers but included representatives of international financial institutions (such as the International Monetary Fund).

Papers are organized into four different sections: Part I) Monetary Policy in View of the Crisis; Part II) Macroprudential and Financial Policies; Part III) Capital Flows, Capital Controls, and Exchange Rate Policies; and Part IV) The Crisis and its Lessons: Some Case Studies. Each Part does not present a consensus position of conference participants but rather the views of individual central bankers concerning issues addressed in their particular papers.

Part I outlines monetary policy responses by central bankers from three different geographic locations affected by the financial crisis: the Euro Area, Turkey, and Chile. Hugh Pill and Frank Smets (from the European Central Bank) focus their attention on the Euro Area. One challenge that raised concerns about the effectiveness of monetary policy was the (zero) lower bound on nominal interest rates, something that Pill and Smets argue was less of an issue in the Euro area.

More attention was given to the introduction of unconventional monetary policy measures (or nonstandard measures – NSMs). These included massive asset purchase programs (many in unconventional markets) and liquidity intermediation (swapping illiquid assets for cash). The authors viewed these policy innovations favorably because they

appeared to both repair financial market transmission mechanisms and to mitigate the impact of financial market instability on the real economy. The success of these policies was due, in part, to a prior commitment to price stability on the part of central banks.

The papers by Alp and Elekdag (Turkey) and Claudio Soto (Chile) examine monetary policy responses in second-world economies. The period from 2002-2010 was one where the Central Bank of the Republic of Turkey (CBRT) implemented a policy of inflation targeting. Because the Great Recession occurred in this time frame, the authors were able to employ their econometric model of the Turkish economy to conduct counterfactual policy simulations. They found that the recession in Turkey would have been much worse had CBRT not previously implemented inflation-targeting along with a flexible exchange rate policy.

Chile's Gross Domestic Product (GDP) fell by 1.5 percent in the wake of the financial turmoil unleashed in 2008, but decline was short-lived. The economy was expanding by the last quarter of 2009 and advanced by 5.0 percent in 2010. Claudio Soto (Central Bank of Chile) attributes the short duration to aggressive policies undertaken by the Central Bank whose initial response was to provide liquidity, but later slashed sharply the overnight lending rate. When this rate reached its (zero) lower bound, the Bank (in mid-2009) unconventionally extended its lending up to six months at the low policy rate. Soto's policy simulations suggest that these actions averted an additional two percent fall in Chile's GDP.

One possible way to avoid repeating the Great Recession experience is to make policy changes. Conference participants uniformly endorsed the need for both enhanced monitoring and additional regulation of the financial system. In conventional rhetoric, they favor *macroprudential* policies that are the focus of the two papers in Part II.

Noting that developing the tools of macroprudential policy is a work in progress, Alberola, Trucharte, and Vega (all of the Bank of Spain) make a case for one particular tool: dynamic loan-loss provisioning. The Bank of Spain has been experimenting with this tool for some time; it involves varying bank loan loss provisions over the business cycle—raising them in the expansionary phase and reducing them in the contractionary phase. Ideally, this reduces the risk of a credit crisis and builds a buffer of bank reserves that makes the financial system more resilient if one occurs. While acknowledging the impossibility of

knowing the counterfactuals, the authors' empirical results lead them to believe that Spanish banks benefitted from the use of dynamic provisioning during the Great Recession.

In the second paper (Part II), Helene Schuberth (Central Bank of Austria) suggests that tax policies contributed to the risk-taking and financial imbalances observed in the recent financial crisis. Hence, Pigouvian tax policies should not be excluded from the macroprudential tool kit because they offer several advantages. Tax policies have an impact throughout the financial sector, thus reaching those institutions not typically affected by more conventional bank regulation. Moreover, as a complement to increased regulation, tax policy can serve as a viable instrument when the objective is to reduce (or eliminate) negative externalities that appear within the financial sector.

Capital flows during the Great Recession led to renewed debates about appropriate exchange rate policies (Part III). Countries recovering relatively quickly often experienced significant capital inflows that led to discussions of possible capital controls to mitigate some consequences. A paper by Jonathan Ostry (IMF) reviewed previous work on exchange rate policies as they relate to such capital inflows.

While Korea was the recipient of substantial capital inflows from 2000-2007, there was a sharp reversal during the financial crisis, and Korea suddenly experienced a significant capital outflow. Chung and Kim (both Bank of Korea) discuss both periods. They infer that flexible exchange rates and relatively free capital flows were not sufficient to insulate the country from the severe external shock that occurred during the Great Recession. A final paper by Capistran (Bank of America Merrill Lynch), and Cuadra and Ramos-Francia (both Bank of Mexico) employed a New-Keynesian Model to test different policy responses to such external shocks. According to their results, countries with stronger economic fundamentals were better positioned to effectively employ countercyclical monetary and fiscal policies during the Great Recession.

Gleaning lessons from the Great Depression experience is the concern in Part IV. Each of the four papers is a case study for an individual country (Australia, Norway, Israel, and Ireland). The first three experienced relatively mild recessions and recovered relatively quickly.

Ireland, the fourth, had a severe financial crisis accompanied by significant turbulence in the real sector. Browne and Kelly (both Central Bank of Ireland) focus on labor market distortions and a troublesome

monetary policy. The former resulted from a collective bargaining process in Ireland that promoted equalization of nominal wages across the traded goods (TG) and nontraded goods (NT) sectors, something that slower productivity growth in the NT sector did not warrant.

Ireland's monetary policy problem related to the Euro Area's common currency, and the ongoing convergence of relatively low-income euro countries to those in the core (Germany, France, and Netherlands). The low interest-rate monetary policy implemented by the European Central Bank was deemed useful for the core euro economies experiencing sluggish growth. It was not appropriate for the more rapidly growing economies in the periphery: Ireland, Greece, Spain, and Portugal. In Ireland, the monetary policy created a wedge between low real interest rates and the marginal product of capital. The resulting overinvestment led to a boom/bust cycle, especially in real property sector.

Study of the three mild recession-quick recovery economies (Australia, Norway, and Israel) might prove instructive for countries (such as the United States) wanting to avoid a repeat of the severe financial crisis of 2008-2009. Sound macroeconomic management was a common feature, including more fiscal discipline. The Australian government, for example, ran a small budgetary surplus, on average, in the 20 years preceding the crisis.

The importance of a credible monetary policy that was conservative and focused on price stability was also cited. Sound banking practices and the near absence of complex financial instruments were also prevalent in these countries. Despite the relative success, central bankers in the countries generally endorsed a need for improved macroprudential policies.

As suggested by the title, this is largely a book by central bankers for central bankers. It holds potential interest for a much larger audience precisely because it reflects the thinking of central bankers. It is reasonable to assume that the lessons they learned will serve as a cornerstone for monetary policy going forward.

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