## Editors' Summary

THE BROOKINGS PANEL ON ECONOMIC ACTIVITY held its eighty-ninth conference in Washington, D.C., on March 18 and 19, 2010. The recent financial crisis and ensuing recession continue to dominate the minds of leading economists, and this conference was no exception. Three of the papers in this volume assess macroeconomic developments in light of these remarkable events, examining the downturn in the U.S. labor market, the vulnerability of the financial system, and the spread of the crisis to emerging market countries. In each case the authors illustrate how economic institutions mediated the consequences of the macroeconomic shocks. A fourth paper, which addresses how best to measure GDP, is also highly relevant, showing that an alternative to the most commonly used measure would have yielded a clearer early warning of the size and scope of the U.S. downturn. The two remaining papers compile interesting new data that speak to ongoing longer-term debates about the balance between work and family and about health care reform.

IN THE FIRST PAPER in this issue, Michael Elsby, Bart Hobijn, and Ayşegül Şahin provide a heroic real-time analysis of recent labor market outcomes, comparing the recession that began in late 2007 with earlier downturns. All major measures of labor market conditions—including changes in unemployment, employment, participation, and hours—indicate that this most recent recession has been more severe than any since the Great Depression. The impact of the recession has been widespread, as unemployment rates among most major socioeconomic groups have exceeded previous postwar peaks.

Yet this recession also mirrors previous downturns in many respects. As in those recessions, the total decline in labor input is about one-third due to a shorter workweek and two-thirds due to fewer people working. Labor force participation has fallen, muting the impact of this decline on the unemployment rate. And the sharpest impacts of this recession also follow the pattern observed in earlier downturns, with men suffering more than women, the young more than the old, and the less educated and racial minorities bearing disproportionate impacts.

The authors then turn to examining inflows and outflows from unemployment. They find that inflows into unemployment rose sharply, particularly in the early stages of the recession, and that the subsequent rise in unemployment largely reflects a rise in the duration of unemployment spells. Yet the rate at which workers separate from jobs has not risen—a fact that suggests a change in the composition of separations toward fewer quits (which often involve job-to-job flows) and more layoffs. The important role of layoffs early in this recession represents a departure from recent downturns, but it parallels earlier severe recessions. Outflows from unemployment (the flip side of the rise in duration of the typical unemployment spell) have been strikingly similar across demographic groups, and hence demographic differences in the impact of this recession—as in previous downturns—are largely driven by the different rates at which members of each group typically enter unemployment.

Looking forward, Elsby, Hobijn, and Sahin note that the rise in inflows to unemployment has abated, and that the rate at which workers are exiting unemployment has fallen further than in previous recessions. Consequently, the key to subsequent recovery will be further rises in the unemployment exit rate. Indeed, perhaps the most distinctive feature of this recession is the recent record low in the exit rate, which is also reflected in current record rates of long-term unemployment. Unfortunately, recent job vacancy data suggest that the Beveridge curve, which relates unemployment and vacancies, has shifted outward, perhaps because of a decline in the efficiency with which job seekers are being matched with available jobs. In turn, outflows from unemployment are lower than might be expected on the basis of the vacancy-unemployment ratio, which, the authors argue, may be partly (but only partly) due to the temporary extension of unemployment insurance for the long-term unemployed. Because the long-term unemployed tend to exit unemployment only very slowly, outflows from unemployment may remain depressed for some time, dampening the recovery. Even so, the authors note that the emerging long-term unemployment problem in the United States remains small relative to the stagnation that virtually halted the recovery of European labor markets in the 1970s and 1980s.

IN THE SECOND PAPER, Jeremy Nalewaik turns to a critically important issue in economic measurement. GDP, a country's overall economic output, can be measured either as the sum of all final expenditures or as the sum of all incomes earned. Yet despite the conceptual equivalence, the measure based on expenditure—which Nalewaik calls GDP(E)—has often differed substantially over recent decades from the measure based on income, or GDP(I). Currently, the Bureau of Economic Analysis, the official source of data for both measures, emphasizes the expenditure-based measure as its "top line" measure, and the income-based measure (which the bureau calls gross domestic income, or GDI) rarely receives much mention in public discussion.

Nalewaik compellingly demonstrates that this emphasis is misplaced. Real-time estimates of the income-based measure of GDP growth have yielded a much more reliable picture of the contours of the business cycle than the expenditure-based measure. He makes his case in three steps. First, he runs an array of horserace regressions, assessing the relative weight that one should put on real-time GDP(I) and GDP(E) data in predicting each of a wide range of measures of business cycle conditions, including changes in the unemployment rate, employment growth, the slope of the yield curve, growth in stock prices, and periods of recession. In each case he finds that GDP(I) vastly outperforms GDP(E). Likewise, GDP(I) does a better job of predicting the future path of many of these business cycle indicators, as well as the GDP predictions of professional forecasters and next quarter's growth in both GDP(E) and GDP(I) themselves. In fact, the only variable that GDP(E) significantly helps predict is the final revised value of growth in this quarter's GDP(E). And even on this score, the regressions using data since the mid-1990s suggest putting about equal weight on GDP(E) and GDP(I).

Second, Nalewaik turns to evaluating the estimates after they have been thoroughly revised. Since the 1980s, the gap between the revised measures has been highly cyclical, with GDP(E) recording a shallower and less distinct business cycle. Digging into the construction of the estimates, he concludes that GDP(E) is constructed from data sources that appear to miss important parts of the business cycle. And indeed, he shows that the final GDP(I) data are much more highly correlated with numerous other indicators of business conditions than are the final GDP(E) data.

Finally, Nalewaik shows that GDP(I) has identified the beginning of each of the last four recessions more quickly than GDP(E). Indeed, one reason that there was some debate as to whether the economy had entered

a recession in late 2007 is that the expenditure-based measure continued to show economic growth throughout 2008.

The paper concludes with a modest proposal: that the Bureau of Economic Analysis emphasize as its top-line estimate of GDP growth a weighted average of GDP(E) and GDP(I), placing at least as much weight on GDP(I) as on GDP(E). We believe that Nalewaik has presented an overwhelming case and hope that the bureau will be responsive; until then, macroeconomists would do well to make themselves more familiar with income-based measures of GDP.

IN THE THIRD PAPER, Garey Ramey and Valerie Ramey bring to light a rather extraordinary recent trend in Americans' use of time: parents—and in particular highly educated parents—have greatly increased the amount of time they spend on childcare activities. In time-use surveys from 1965 to 1995, mothers recorded an average of about 12 hours per week looking after their children, and the gap between college-educated mothers and those with less education was about 1 hour. Yet by 2007 this time commitment had risen to 21 hours per week for college-educated mothers, and to 16 hours per week for non-college-educated mothers. Similar changes were observed among fathers: the rise in their childcare time was smaller in absolute terms, but larger proportionally. These are macroeconomically important shifts, representing around \$300 billion in forgone wages, and the change in time use is roughly comparable to the effect of a typical recession on work hours.

The authors present a novel hypothesis for these observations. The child population has grown with the baby-boom "echo," but ever-more-valuable spots in elite colleges have not increased commensurately. In response, parents, and especially college-educated parents, are engaged in a "rug rat race," making ever-increasing investments of their time in activities that they believe will help build a compelling college application for their children. Just as in an arms race, or as in the original "rat race" among urban white-collar workers, this rivalry can lead to overinvestment in some activities relative to the social optimum.

The authors document several facts consistent with their explanation: the rise in time spent with children paralleled the rise in the number of graduating high school seniors; much of this rise reflects time spent caring for older children, and in particular transporting them to extracurricular activities; and the trend toward increasing childcare time is less evident in Canada, where college admissions are less rivalrous. The authors also assess—and reject—a number of competing explanations, including changes in who becomes a parent (the rise in average childcare hours remains even when averaging across all adults); rising incomes (an insufficient explanation given the moderate income elasticity of childcare time); increasing safety concerns (survey data suggest that such concerns actually fell over the relevant period); greater enjoyment of childcare (which predicts, counterfactually, that fertility would also rise); and more flexible work schedules (which cannot explain why the rise is even greater among nonworking mothers). The facts so carefully catalogued by the authors will surely generate further research, and with it, even more hypotheses about just what factors are driving these enormous and important changes in family and work life.

IN THE FOURTH PAPER, Alan Greenspan offers his diagnosis of the recent financial crisis and his proposals for reducing the chances of future crises. The seeds of the crisis, in his view, were sown by a period of historically low real interest rates, unprecedented macroeconomic stability, and low inflation. These developments led to large increases in investors' willingness to take on risk and, partly as a result, to the rapid growth of home prices in the mid-2000s. This price growth in turn fueled (and was reinforced by) an explosion of securitization of mortgage loans into assets whose risk characteristics were often poorly understood and that were often held by highly leveraged institutions. When home prices began to fall in 2006, the result was a cascade of financial failures and contagion. Greenspan assigns some of the blame for the crisis to failures of regulatory oversight, but he finds no evidence that the conduct of monetary policy played a role: economic theory, time-series evidence from the United States, and cross-country evidence all suggest that the central bank's decisions about its interest rate target over a period of a few years are not a major driver of home prices.

Greenspan then turns to the issue of how to reduce the risk of future crises. He argues that policymakers face daunting empirical difficulties in fully understanding risks and in identifying asset bubbles and potential incipient crises in real time. This implies that policies that require regulators to forecast financial instability are unlikely to succeed, especially considering the political and practical difficulties in continually adjusting regulation in response to economic developments.

Instead, he argues, the system needs to be designed so that it is broadly robust to shocks. One key feature of such a system would be increased capital requirements for financial institutions. Based on historical relationships, he estimates that these could be as high as 10 to 15 percent without impairing the functioning of the banking system. Such requirements would need to apply both to existing regulated banks and to the "shadow" banking system and be accompanied by ample collateral and liquidity requirements. Finally, Greenspan argues that it is essential to address the problem of financial institutions that are "too big to fail," either by breaking them up or by putting in place mechanisms that subject their equity holders and creditors to the possibility of large losses without threatening the stability of the financial system.

IN THE FIFTH PAPER, Olivier Blanchard, Mitali Das, and Hamid Faruqee investigate the short-run impact of the global financial crisis on emerging market countries. They begin with a simple reduced-form model to identify possible channels of transmission. Some channels involve trade, through reduced demand for a country's exports when its trading partners enter a crisis. Others involve financial markets, through reduced demand for a country's assets and increases in risk premia. The authors argue that it is crucial to recognize the adverse effects of depreciation of the home currency on real debt burdens, and the possibility that depreciation may reduce net exports in the short run. Once these complications are introduced, even a comparatively barebones model allows for a potentially rich set of effects of the initial shocks and for complex interactions with the policy responses.

Blanchard, Das, and Faruqee then turn to the cross-country data. They find evidence of effects working in the expected directions. In late 2008 and early 2009, countries whose trading partners suffered larger shortfalls in growth relative to precrisis forecasts suffered substantially larger growth shortfalls themselves, suggesting an important impact through trade. And countries that had more debt coming due during the crisis also suffered much larger growth shortfalls, suggesting an important impact through financial markets.

At the same time, no simple story explains the different effects of the crisis across countries. Although both trade and financial variables typically are significant when both are included in the regressions, a substantial portion of the variation in growth remains unexplained. The results also imply that a hypothetical country with no trade or financial exposure to the rest of the world would nonetheless have suffered a significant growth shortfall from the precrisis prediction, suggesting that more was at work than the channels the authors focus on. The authors are unable to detect any large role of reserve holdings, the exchange rate regime, or the fiscal response in determining the short-run impact of the crisis.

The paper concludes by looking at three countries in detail: Latvia, Russia, and Chile. The contrast between Russia and Chile is particularly striking. Much about the two countries before the crisis was similar: both are financially open economies whose exports are dominated by commodities. Yet Russia had one of the largest growth shortfalls, while Chile's shortfall was below the average. The different outcomes are not entirely mysterious, however: Chile's stronger institutions and longer track record of sound policies seem to have prevented a net capital outflow, whereas Russia's attempt to use its reserves to stem what proved to be overwhelming pressure for depreciation led to very large capital outflows.

IN THE FINAL PAPER, Tomas Philipson, Seth Seabury, Lee Lockwood, Dana Goldman, and Darius Lakdawalla examine geographic variation in health care utilization and spending. An important line of inquiry—most prominently associated with the Dartmouth Atlas project—has documented large disparities in health care use and spending across regions of the country. These disparities cannot be explained by differences in observed patient demographics or disease prevalence, and regions using more health care do not exhibit substantially better outcomes. But the authors note that these findings are largely based on data from Medicare, which is a public program. By contrast, private payers may have stronger incentives to restrain costs and utilization, and hence greater incentives to eliminate wasteful procedures. On the flip side, government-run insurers have greater bargaining power, which they may use to restrain costs.

In their empirical analysis, the authors compare health care use and spending records of employees and retirees of 35 Fortune 500 firms with patient records from a survey of Medicare beneficiaries. In order to analyze samples with roughly comparable health status, they focus only on patients with a diagnosis of heart disease. The authors find that the variance of health care utilization across 99 metropolitan areas tends to be lower in the private than in the public sector, although this finding is sensitive to controlling appropriately for differences in the demographic and health status of the two samples. The geographic variation in health care spending (as opposed to utilization), on the other hand, is generally lower in the public sector. The authors highlight the need for further research on the determinants and benefits of health care utilization and spending in the private sector.