



CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Douglas Holtz-Eakin, Director

September 6, 2005

Honorable William H. Frist, M.D.
Senate Majority Leader
United States Senate
S-230 Capitol
Washington, DC 20515

Dear Senator Frist,

The Congressional Budget Office (CBO) has received numerous inquiries regarding the likely consequences of Hurricane Katrina for the national economy, federal receipts, and federal outlays. While the primary consideration is the human cost of the disaster, it will also likely spawn economic impacts, some of which will spread throughout the economy.

Those impacts will arise from the disruption of production (especially of oil and oil products) and spending in the affected areas, from the loss of wealth of those most directly affected, and from the loss of life. In addition, the disaster is also likely to have budgetary impacts beyond the recently enacted supplemental. Some of those will flow directly from federal involvement in the cleanup from disaster; others will come from the disruption to production and private spending.

While it is not possible at this time to provide a clear picture of the impacts, CBO staff have put together some initial thoughts about those economic and budgetary effects in the attachment to this letter. To provide context, recall that the overall economy was growing steadily at the time the disaster. (CBO's summer forecast called for 3.7 percent real growth in 2005 and 3.4 percent in 2006.) The devastation in the Gulf Coast region is unlikely to knock the economy far from that course. While making specific estimates is fraught with uncertainty, evidence to date suggests that overall economic effects will be significant but not overwhelming. Because they are concentrated in this year, there is the potential to reduce growth by between one-half and one percentage point at an annual rate in the second half of 2005. (On a year-to-year basis, the impact may be as small as a few tenths of a percent of GDP). Last week, it appeared that larger economic impacts might occur, but despite continued uncertainty, progress in opening refineries and restarting pipelines now makes those larger impacts less likely.

While Katrina has devastated ordinary business, it will also likely lead to a boom in clearing and reconstruction activity, first in the areas along the coast that escaped persistent flooding, and then in New Orleans. This follows a pattern familiar from past natural disasters (such as Hurricane Andrew in 1992), but with the caveat that such reconstruction may begin a bit less rapidly.

At this point, the ultimate impact of Hurricane Katrina on the federal budget is unclear, but it will be dominated by legislative actions of the Congress. The President has already requested and the Congress has appropriated \$10.5 billion in emergency assistance. In addition to that legislation, substantially more funding is likely to be provided for assistance to businesses and for long-term reconstruction efforts. There may be other changes in spending—both increases and decreases—associated with the disaster, in part because the disruption of payments systems in the Gulf Coast region may affect the timing of several kinds of federal payments and of tax receipts.

I hope that you find the attachment useful. CBO would be pleased to address any further questions that you may have.

Sincerely,

A handwritten signature in cursive script, appearing to read "Douglas Holtz-Eakin".

Douglas Holtz-Eakin
Director

Attachment

Identical Letters sent to: Honorable Harry Reid, Honorable J. Dennis Hastert, and Honorable Nancy Pelosi

Macroeconomic and Budgetary Effects of Hurricane Katrina

Katrina could dampen real gross domestic product (GDP) growth in the second half of the year by ½ to 1 percentage point and reduce employment through the end of this year by about 400,000. Most economic forecasters had expected 3 percent to 4 percent growth during the second half, and employment growth of 150,000 to 200,000 per month. Economic growth and employment are likely to rebound during the first half of 2006 as rebuilding accelerates.

The Congress has appropriated \$10.5 billion for spending on emergency relief, and many analysts expect more to be provided in the near future. Katrina will affect the budget in a number of ways in addition to the emergency spending—outlays may be affected by disruptions in the submission or processing of claims for federal payments, reductions in royalty payments from oil and gas drilling, and the sale of oil from the Strategic Petroleum Reserve; and tax receipts will be affected by immediate reductions in national income and gasoline consumption, along with temporary tax relief provided by the Internal Revenue Service—but it is still too soon to estimate what the net effects on the budget might be.

Macroeconomic Effects

Katrina's macroeconomic effects will be greater than those of previous major hurricanes such as Andrew and Hugo, which caused a great deal of devastation but which had a small effect on the macroeconomy. Katrina's effects will be greater because of the greater devastation, the long-term flooding of New Orleans (which will preclude immediate rebuilding), and the destruction of energy and port infrastructure.

Energy Supply

The supply of petroleum products and natural gas will be lower than it otherwise would have been, but the reduction in supply will not necessarily hurt economic activity nationwide significantly. If most of the refineries come back online during the next two weeks and there are no significant periods of total unavailability of product—that is, if rationing is done through the price mechanism alone—energy use will tend to be put to its highest-value uses, and economic activity will not be seriously affected.

Spot prices for energy products have begun to fall from last week's highs.

Petroleum and Distillates

The pipelines for refined product have been largely restored, but three of the major refineries that were shut down may not reopen for more than a month, and petroleum production from some oil rigs in the Gulf will be curtailed for many months. The supply of crude oil from the Strategic Petroleum Reserve (which is already being sent to refineries), the reallocation of petroleum product within the United States, and the likelihood of more petroleum product from overseas (which may take three or four weeks to get here) will dampen the adverse effects of the reduction in supply.

Natural Gas

Natural gas markets have been affected by the storm in four main areas: production, processing, electricity generation, and local distribution. First, production from the Outer Continental Shelf was shut down before the storm and cannot fully resume until production platforms in the Gulf are all inspected and restaffed (and repaired, where necessary). Half the original loss of natural gas supply—which totaled nearly 15 percent of the nation’s supply—has been restored. Second, four natural gas processing plants that help produce pipeline-quality gas were closed. The Congressional Budget Office (CBO) cannot confirm the status of those gas plants—any lingering problems could impede pipeline deliveries. Third, the Louisiana electric utility, Entergy, has had some problems delivering gas to its generating plants, although current reports indicate that gas is being received. And fourth, local distribution of natural gas to customers throughout the region is disrupted because of broken lines.

Production and Employment in the Directly Affected Areas

Production

Production of electricity, oil, refined products, port services, housing services, manufacturing, retailing, tourism, and other consumer services will be sharply curtailed for at least a few months in the affected areas. The gross state product of Louisiana is about 1.2 percent of U.S. GDP, and that for Mississippi is about 0.7 percent. If half of that product were lost for three months (September to November), the level of real GDP would be lowered by about 1 percent from what it otherwise would be, cutting about 1.3 percentage points from the annualized growth rate for the third quarter and about 2.7 percentage points from the fourth quarter. It is unlikely that production would be hurt that much for that long, however. Presumably some people in New Orleans and other parts of the coast will be able to return to work in one or two months, and construction employment will be picking up during the fourth quarter. Therefore, it is more likely that economic activity in the affected area would directly reduce the growth of GDP by less than 1 percent for both the third and fourth quarters.

Employment

The main areas likely to experience prolonged and substantial disruption of economic activity and employment are the New Orleans-Metairie-Kenner metropolitan statistical area (MSA) of Louisiana and the Gulfport-Biloxi and Pascagoula MSAs of Mississippi. Other areas were affected by the storm but are likely to experience little if any sustained disruption of activity.

Employment for September will decline significantly—estimates of the impact range from 150,000 to half a million—as a direct consequence of the hurricane. The Bureau of Labor Statistics (BLS) may or may not be able to estimate the size of this effect when it releases the September data on October 7. Employment will increase in subsequent months, as workers return home and businesses reopen and as reconstruction activity gathers steam. The large-scale relocation will generate additional demand for workers in receiving communities; some of those jobs will be filled by the evacuees themselves. Once New Orleans residents are able to return home, the net effect on the level of employment will be positive, as reconstruction activity continues.

Louisiana. New Orleans and most of its suburbs have been evacuated, and it will take considerable time before basic services are restored and most residents are able to return. Total employment (based on the BLS's Establishment Survey) in the New Orleans-Metairie-Kenner MSA was 616,000 in 2004, including 510,000 private-sector workers. Data from the BLS *Quarterly Census of Employment and Wages* indicate that of the 596,000 workers covered by unemployment insurance within that MSA, 248,000 were employed in Orleans Parish (City of New Orleans), 213,000 in Jefferson Parish, and the remaining 135,000 in the other five parishes making up the MSA. Not all of the suburban areas experienced flooding to the same degree as New Orleans itself, so some workers and residents of those areas may be able to return sooner.

Some of those workers, especially those whose jobs involve the provision or restoration of essential services and those involved in reconstruction, are likely to return to work soon and remain on payrolls. Some others, including federal and state government workers and employees of large multiestablishment corporations, may be able to work from alternate locations until they are able to return home. But it is reasonable to expect that the majority will be off payrolls at least through September, with only a gradual rebound. That effect will be partially offset by large-scale hiring of construction workers.

Mississippi. The Gulf Coast areas sustained major damage, but more from wind and storm surges than from flooding. Thus, residents should be able to return much sooner than in the New Orleans case. Total employment last year stood at 113,000 in the Gulfport-Biloxi MSA. That includes roughly 14,000 employed by casinos, which were severely damaged or destroyed. Another 54,000 were employed in the Pascagoula MSA. Aside from the effect on casino workers, many of whom are reportedly still being paid, the effect on employment should be smaller and of shorter duration than in Louisiana (and will again be offset to a considerable degree by reconstruction activity).

Effect of Katrina on the Ability to Make Payments

There are few reported problems related to the inability of people to make payments. Apparently, the Federal Reserve's contingency plans are intact. Although the New Orleans branch of the Atlanta Federal Reserve Bank remains closed, other branches of the Atlanta Fed are covering currency demands and check-processing needs.

- News anecdotes indicate that many financial companies are relaxing their payment requirements and waiving late fees for contractual obligations (loan and insurance payments, for example) of those affected by Katrina. Some banks are waiving ATM (automated teller machine) fees for cash withdrawals by nondepositors.
- By last weekend, about 80 percent of the roughly 240 Federal Deposit Insurance Corporation-regulated banks in the Katrina-affected area had been reached by regulators. Most were open for business in some fashion.
- Social Security recipients can go to any Social Security office to pick up their monthly check.
- Although the lack of electricity makes credit card payments difficult, people are making do. For example, one news report indicates that one business is recording payments with paper and pencil for future debiting.
- Some Blue Cross/Blue Shield plans in the affected areas were not making payments to medical providers last week.
- The Texas Workforce Commission is assisting the Louisiana Department of Labor in processing Louisiana disaster unemployment assistance claims.

Reconstruction

Rebuilding will take place along several dimensions—rebuilding of residences, businesses, infrastructure, and stocks of consumer durables. Nationwide, each housing start adds over \$200,000 to GDP. So, each block of 100,000 housing units (homes and apartments) that needs to be completely rebuilt raises GDP by over \$20 billion, or about 0.2 percent. Repairs and major replacements of structures not completely destroyed would add to that figure. To estimate the amount of eventual rebuilding, CBO will need information on the number of housing units lost or the dollar value of housing losses (both insured and uninsured). Replacements of destroyed residences will be needed whether the former residents rebuild in the same place or elsewhere.

Nonresidential structures—shops, factories, streets, bridges—will also need to be rebuilt. CBO has no information on the value of such structures destroyed by Katrina, but it is likely to be substantial. Nationwide, the stock of private nonresidential fixed assets is about 90 percent as large as the stock of residential fixed assets, in dollar terms, while the stock of government fixed assets (for example, roads and schools) is about half as large as the stock of residential fixed assets.

The timing of such rebuilding is highly uncertain. Presumably, clearance and rebuilding will start almost immediately in the areas of the coast that have not suffered persistent flooding but will be delayed up to several months in New Orleans. Nonresidential structures typically take longer to build than residential structures, so one might expect this rebuilding to proceed more slowly than the rebuilding of lost residences.

Reconstruction activity will employ a large number of construction workers and will increase the demand for construction materials such as cement and plywood. The demand for those resources is likely to cause a slight increase in the cost of construction elsewhere in the country.

Insurance

Preliminary estimates suggest that privately insured losses from Hurricane Katrina could exceed \$30 billion. (By comparison, insurers paid about \$32.5 billion after 9/11.) Undoubtedly, some businesses have business interruption coverage which will allow them to continue to meet their payrolls, but other businesses likely did not purchase that coverage. (A significant portion of the insured losses after 9/11 were for business interruption insurance.)

Although no estimates have been published, federal flood insurance payments are also likely to be substantial. Those payments could exceed the program's reserves and thus necessitate Congressional action. Additional payouts on federal crop insurance are also possible. Finally, the Congress may enact additional supplemental relief.

Production Elsewhere in the United States

Economic activity in the rest of the United States will be adversely affected through higher energy prices, which will temporarily reduce other consumption (and reduce saving), and through any reduction in port activity, which may keep energy supplies and raw materials from getting to producers and consumer goods from getting to retailers.

The supply of petroleum products, as indicated above, does not appear to be a major macroeconomic problem, but higher gasoline prices will temporarily reduce both gasoline consumption and consumption of other goods and services. The increase in gasoline prices is basically a temporary redistribution of income from consumers of gasoline to the stockholders of refiners. As a ballpark estimate, assume a 40 percent average rise in gasoline prices in September and that consumers, on average, reduce nongasoline spending by 40 cents for each dollar increase in gasoline prices. Since gasoline accounts for 2.7 percent of consumption (without the price increase), the rise in prices would reduce consumption (net of the rise in gasoline prices) by 0.4 percent (40 percent x 40 percent x 2.7 percent), or about \$38 billion at an annual rate. If sustained, that would reduce annualized GDP growth for the third quarter by 0.4 percent and for the fourth quarter by 0.9 percent. That effect is temporary: as gasoline prices return to pre-Katrina levels, consumption would bounce back, meaning higher GDP growth.

The damage to the Port of Southern Louisiana is significant, but most shipping will be able to resume in a few weeks or be diverted from the New Orleans facilities to other facilities on the Mississippi (such as Baton Rouge) or to Houston. Vessels drafting more than 39 feet cannot currently use the river. Only one grain elevator appeared to be severely damaged, and the others are coming back into operation as power is restored.

Budgetary Effects

At this point, it is unclear what the ultimate impact of Hurricane Katrina will be on federal spending. Thus far, the President has requested and the Congress has appropriated \$10.5 billion in emergency assistance, with \$10 billion of that total going to the Federal Emergency Management Agency's (FEMA's) disaster relief account. (The remaining \$500 million was appropriated for operation and maintenance for costs incurred by the Department of Defense for evacuation, deployment of personnel, and related efforts.) CBO expects that most of the outlays from that supplemental appropriation will occur in fiscal year 2006. Much of the new funding may be obligated in this month (that is, within fiscal year 2005), but most of the checks are likely to be written in subsequent months. In addition, FEMA may spend at least a few hundred million dollars more in September—from funds previously appropriated—than it would have expended otherwise.

That initial funding is likely to be used mostly for short-term emergency assistance for individuals adversely affected by the hurricane. It is likely that more funding will be provided for assistance to businesses and for long-term reconstruction efforts.

The hurricane will affect federal spending in September and the months beyond in a number of other ways. Some of those effects may simply be a shift in the timing of spending or in the collection of offsetting receipts. In the near term, some programs may experience lower outlays because federal agencies or their agents may not be able to process payments as rapidly as usual or because recipients of payments may be delayed in submitting claims. Offsetting receipts from royalty payments for leases on the Outer Continental Shelf are likely to be lower—by at least a few hundred million dollars—for one month or more this fall. However, the Department of Energy will collect receipts for the sale of oil from the Strategic Petroleum Reserve, possibly in the neighborhood of \$2 billion (for the announced sale of 30 million barrels). In addition, federal flood and crop insurance payments could increase, and the government may experience an increasing number of defaults in some of its loan and loan guarantee programs. Most of the outlay effects of those near-term changes are likely to occur after September (that is, in fiscal year 2006). It is still too soon to tell what the net effects for either fiscal year 2005 or fiscal year 2006 might be—though the effects in 2005 are likely to be small, since there is so little time left in the fiscal year.

The effects of Hurricane Katrina on tax receipts are also unclear at this point. Federal receipts will be affected not only because of the immediate reductions in national income and gasoline consumption, but also because of temporary tax relief provided by the Internal Revenue Service.

Victims of Hurricane Katrina in Louisiana and designated areas of Mississippi, Alabama, and Florida can delay their estimated payments of individual and corporate income taxes beyond the normal September 15 due date. Those tax payments instead will not be due until at least October 31, therefore delaying some tax receipts into fiscal year 2006. Taxpayers who reside outside of the affected areas but have their financial records or tax practitioners within the areas also can qualify for the delay in payments. Other payment delays applying to withheld income and employment and excise taxes do not currently last into fiscal year 2006. Also, through September 15 penalties will not be assessed on taxpayers who sell for highway use certain dyed diesel fuel (which is normally available only for tax-exempt purposes). All of the payment delays may be extended at a later date for certain taxpayers.