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

Douglas W. Elmendorf, Director

May 2, 2013

Honorable Paul Ryan
Chairman
Committee on the Budget
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

As you requested, this letter provides information about how the Congressional Budget Office (CBO) would analyze the economic effects of proposals to make major changes in immigration policy. The details of such an analysis would depend importantly on the specific provisions of any proposed legislation. Further, because immigration legislation can be quite complicated, CBO expects that preparing such an analysis would be time-consuming. CBO has not yet completed an analysis of any immigration legislation currently being considered by the Congress.

Previous estimates prepared by CBO illustrate the agency's general methodological approach to such analysis. Those estimates also provide an idea of the potential magnitude of the economic effects of large-scale changes to immigration policy as well as the resulting budgetary impact of such changes. For example, in 2006, CBO and the staff of the Joint Committee on Taxation (JCT) analyzed the potential budgetary and economic effects of S. 2611, the Comprehensive Immigration Reform Act of 2006, as introduced on April 7 of that year.[1] CBO and JCT estimated that the bill would increase federal revenues by $66 billion and direct spending by $54 billion over the 2007–2016 period; if the amounts of discretionary spending authorized in the bill had been appropriated, it would have boosted outlays by an additional $25 billion between 2007 and 2011.[2]

[1] Congressional Budget Office, cost estimate for S. 2611, Comprehensive Immigration Reform Act of 2006, and *Additional Information on the Estimated Budgetary and Economic Effects of S. 2611* (attachments to a letter to the Honorable Charles E. Grassley, May 16, 2006), www.cbo.gov/sites/default/files/cbofiles/ftpdocs/72xx/doc7208/s2611.pdf (201 KB).

[2] CBO's estimates of the broader macroeconomic effects of the legislation appear later in this document and are given for the periods 2007 to 2011 and 2012 to 2016. For purposes of comparison, the budgetary effects over those periods that were shown in CBO's cost estimate are as follows: an increase in revenues of $13 billion between 2007 and 2011 and $53 billion between

Following the long-standing convention of *not* incorporating macroeconomic effects in cost estimates—a practice that has been followed in the Congressional budget process since it was established in 1974—cost estimates produced by CBO and JCT typically reflect the assumption that macroeconomic variables such as gross domestic product (GDP) and employment remain fixed. However, because S. 2611 would have had the direct effect of significantly increasing the size of the U.S. labor force (resulting in an estimated 3.4 million additional workers in the United States by 2016), CBO and JCT relaxed that assumption and incorporated in the cost estimate the direct effect of the bill on the U.S. population, employment, and taxable wages. The cost estimate for S. 2611 describes that approach as follows:

> Conventional estimating assumptions hold overall economic activity constant. In practice, this results in the Joint Committee on Taxation assuming fixed employment and capital stock. If enacted, S. 2611 would result in a significant increase in immigration. Consequently, JCT has relaxed the fixed employment convention and estimates a net increase in employment, total wages, and the associated revenues.

CBO's analysis also incorporated an assessment of the way projected increases in the population (an additional 7.8 million people by 2016) would affect federal spending if the bill was enacted.

Although that cost estimate deviated in part from normal estimating conventions in order to reflect the bill's impact on the size of the U. S. population and labor force, the estimate did not include a full range of macroeconomic effects. In a separate memorandum that accompanied the cost estimate, CBO described the effects that were not taken into account in that estimate (specifically, the impact on private saving, capital flows, and interest rates, and the resulting effect on wages), and the additional budgetary effects that would ensue.[3] An excerpt from that memorandum, titled *Additional Information on the Estimated Budgetary and Economic Effects of S. 2611*, appears below:

> The Comprehensive Immigration Reform Act of 2006 could affect the economy in a variety of ways. Most importantly, CBO estimates that it would add over 3 million employees to the American workforce by 2016, mostly through its guest worker program and increased caps on immigration. The work performed by those added employees would

---

2012 and 2016; an increase in direct spending of $13 billion between 2007 and 2011 and $41 billion between 2012 and 2016; and, if the amounts of discretionary spending authorized in the bill were appropriated, an additional increase in outlays of $25 billion between 2007 and 2011 and $39 billion between 2012 and 2016.

[3] Congressional Budget Office, *Additional Information on the Estimated Budgetary and Economic Effects of S. 2611* (attachment to a letter to the Honorable Charles E. Grassley, May 16, 2006), pp. 6–8, www.cbo.gov/sites/default/files/cbofiles/ftpdocs/72xx/doc7208/s2611.pdf (201 KB).

increase the production of goods and services and raise gross domestic product, other things being equal. The bill would also affect both private and public saving, in part through its effects on the federal deficit, altering the amount of funds available for productive investment.

The impact of S. 2611 on the economy would depend largely on the productivity of the added workers and the bill's effect on the nation's capital stock. As described above, CBO assumed that the additional workers would be as productive as (and earn the same wages as) the current foreign-born population. The effect on the capital stock would depend on the bill's impact on the federal budget (or public saving), private saving, and capital flows from other countries. For this analysis, CBO assumed an effect on public saving consistent with its cost estimate for the bill.

CBO produced estimates using two sets of assumptions for the impact on private saving and capital flows because of the high degree of uncertainty about that impact. Under the high investment assumption, private saving and capital flows were assumed to fully adjust to the additional supply of labor, keeping wage and interest rates at baseline levels.[*] Under the low investment assumption, investment was assumed to adjust by a smaller amount, so that wage rates fall below, and interest rates rise above, baseline levels.[**] This assumption could be interpreted as assuming that net capital inflows from abroad were at baseline levels and that new immigrants save at a rate lower than the U.S. average (because they tend to earn less, and lower earners tend to save at a lower rate). It could also be interpreted as combining a somewhat higher saving rate together with an increase in remittances, which constitute a capital outflow.

Under the high investment assumption, CBO estimates that enacting the bill would increase GDP by 0.4 percent, on average, from 2007 through 2011, and by 1.3 percent from 2012 through 2016. Under the low investment assumption, CBO estimates that enacting the bill would increase GDP by 0.3 percent, on average, from 2007 through 2011, and by 0.8 percent from 2012 through 2016.

Those economic effects could, in turn, affect the budgetary impact of the bill. In its revenue estimate, the Joint Committee on Taxation included taxes on wages earned by additional immigrants, as well as the revenue implications of reductions in average wage rates due to additional workers. However, a wider range of effects is possible. CBO estimated the additional budgetary impact of changes in the capital stock, which would affect wage rates, interest rates, and revenue from taxes on capital income, under the low investment and

> high investment assumptions described above. Under the high investment assumption, CBO estimated that those effects would improve the budgetary impact of the bill by about $30 billion over the 2007–2011 period, and by about $130 billion from 2012 through 2016. Under the low investment assumption, CBO estimated that those effects would improve the budgetary impact of the bill by about $20 billion over the 2007–2011 period, and about $60 billion from 2012 through 2016.
>
> * In its implications for domestic investment, this corresponds to a "small open economy" assumption.
>
> ** For the purposes of the economic and budgetary projections presented in this section, under the low investment assumption CBO estimated that wage rates would decline by about 0.4 percent in 2016 in response to additional labor supply under S. 2611. That estimate is consistent with the results of empirical research, as presented in the previous section. CBO also assumed a decline in labor supply of somewhat less than 0.1 percent in response to the lower wage rates.

CBO and JCT anticipate taking a similar approach for any forthcoming legislation that would make major changes in immigration policy—reflecting any significant changes in the size of the U.S. population and labor force in the cost estimate for the bill, and describing any broader macroeconomic effects in supplemental material.

However, any future estimates of the macroeconomic effects and resulting budgetary impact of major changes in immigration policy would differ in some ways from what was estimated in 2006. First, that analysis applied specifically to the Comprehensive Immigration Reform Act of 2006; a different set of policy changes might lead to different economic outcomes. Specifically, the estimated economic effects of major changes in immigration policy would depend largely on the projected impact of those changes on the labor supply and on the wages of both native- and foreign-born workers. Those effects, in turn, would depend on how changes in policy might be expected to affect such factors as the number of immigrants entering the country, their participation in the labor force, their propensity to be employed, the skill set of the entire labor force, and overall productivity.

Second, although CBO would use the same basic analytic approach that it did in 2006, new estimates of proposals to make major changes to immigration policy would incorporate improvements that CBO has made in its macroeconomic modeling in recent years.[4] Those analytical changes would probably have only a modest impact on the estimated economic effects of changes in immigration

---

[4] CBO continues to use a Solow-type growth model to estimate the response of investment, interest rates, and wages to changes in the labor supply in the medium run and long run. For a review of the characteristics of CBO's Solow growth model, see Congressional Budget Office, *Macroeconomic Effects of Alternative Budgetary Paths* (February 2013), Appendix A, www.cbo.gov/publication/43769.

policy. Therefore, the findings from the 2006 analysis (as reproduced above) offer a useful guide to the general nature of economic changes that CBO would currently project to result from major changes in immigration policy, if those changes were broadly similar to the ones embodied in S. 2611 in 2006.

I hope that you find this information helpful. If you have any questions, please contact me or CBO staff. The primary staff contact for this analysis is Benjamin Page.

Sincerely,

Douglas W. Elmendorf

Douglas W. Elmendorf
Director

cc: Honorable Chris Van Hollen
Ranking Member

Honorable Patty Murray
Chairman
Senate Committee on the Budget

Honorable Jeff Sessions
Ranking Member
Senate Committee on the Budget

Honorable Bob Goodlatte
Chairman
House Committee on the Judiciary

Honorable John Conyers, Jr.
Ranking Member
House Committee on the Judiciary

Honorable Patrick J. Leahy
Chairman
Senate Committee on the Judiciary

Honorable Chuck Grassley
Ranking Member
Senate Committee on the Judiciary

Honorable Dave Camp
Chairman
House Committee on Ways and Means

Honorable Sander M. Levin
Ranking Member
House Committee on Ways and Means

Honorable Max Baucus
Chairman
Senate Committee on Finance

Honorable Orrin G. Hatch
Ranking Member
Senate Committee on Finance