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Okun's Law: Output and Unemployment

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Despite the popular emphasis on the U.S. housing price bubble and domestic monetary and regulatory policies, the recession has been a worldwide phenomenon with varying effects across countries. For example, the chart shows that from 2008:Q2 to 2009:Q3 U.S. output growth declined less than in most other industrialized countries while U.S. unemployment rose higher and faster than it did in most other major industrialized countries.

Output and employment commonly move together. In 1962 Arthur Okun documented that U.S. unemployment tended to fall by 1 percentage point for every 3-percentage-point rise in gross national product (i.e., output); observers subsequently dubbed this empirical regularity "Okun's law"[1]—thus, the United States had an Okun coefficient of 3. Output might logically be expected to move approximately one for one with employment, yet Okun argued that measured unemployment is less volatile than output because fluctuations in hours per worker and labor force participation hide some underemployment.

Economists have long noted that most industrialized countries have larger Okun coefficients than do the United States and—to a lesser extent—Canada and the United Kingdom.[2] In other words, most industrialized countries' unemployment rates tend to vary less for a given gross domestic product (GDP) fluctuation than does that of the United States. The usual explanation for this is that the United States, Canada, and the United Kingdom have less heavily regulated labor markets in which businesses can more easily lay people off during slowdowns. Most countries have some combination of stronger implicit social job protections (e.g., Japan), stronger unions, or greater formal restrictions on releasing workers.

The Organisation for Economic Co-operation and Development (OECD) compiles an employment protection index that measures how easily employers in various countries can terminate workers or hire temporary workers. The United States, Canada, the United Kingdom, Japan, Germany, and France rank 1, 2, 3, 7, 22, and 25, respectively, among 30 OECD countries in labor market flexibility. The relatively low levels of labor market regulation in the United States and Canada are consistent with their relatively large increases in unemployment in the recent recession.

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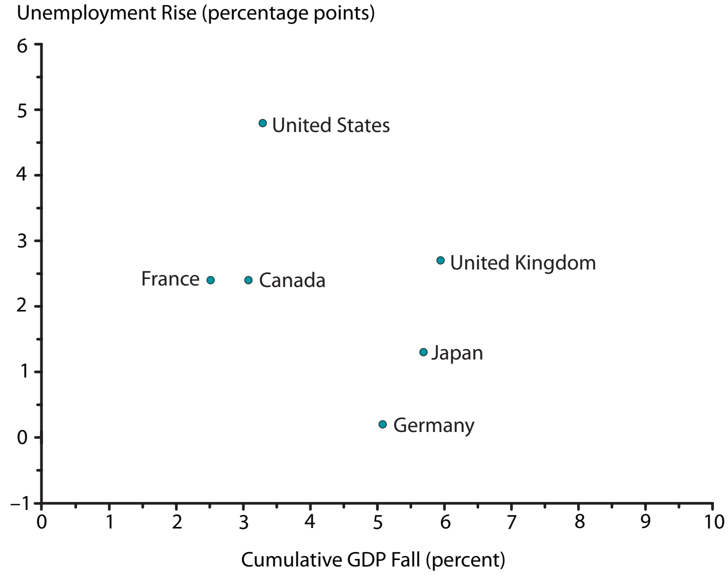
Okun coefficients can change over time because the relationship of unemployment to output growth depends on laws, technology, preferences, social customs, and demographics. Some economists have suggested that labor market

Okun's Ratios: 2008:Q2–2009:Q3



NOTE: Combinations of cumulative GDP declines and unemployment increases from 2008:Q2 through 2009:Q3 for six industrialized countries. All data are from the OECD.

reforms have made most industrialized countries more like the United States, with smaller Okun coefficients.[3] The chart shows, however, that the United States still has had the largest change in unemployment per unit of output in the recent recession.

While job stability is a good thing, economics often requires trading one good for another. Restrictions on dismissing workers make firms more reluctant to hire workers in the first place. Therefore, countries that heavily regulate labor markets tend to have higher unemployment. Since 1989, for example, U.S. monthly unemployment has averaged 5.55 percent while German and French unemployment rates have averaged 7.93 and 9.62 percent, respectively. There is no free lunch with more labor market regulation. ■

[1] Okun, Arthur M. "Potential GNP: Its Measurement and Significance." In: *Proceedings of the Business and Economic Statistics Section of the American Statistical Association*. Alexandria, VA: American Statistical Association, 1962, pp. 89-104.

[2] Kaufman, Roger T. "An International Comparison of Okun's Law." *Journal of Comparative Economics*, June 1988, *12*(2), pp. 182-203; and Moosa, Imad A. "A Cross-Country Comparison of Okun's Coefficient." *Journal of Comparative Economics*, June 1997, *24*(3), pp. 335-56.

[3] Lee, Jim. "The Robustness of Okun's Law: Evidence from OECD Countries." *Journal of Macroeconomics*, Spring 2000, *22*(2), pp. 331-56.

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