National Leadership and Economic Growth

Benjamin F. Jones

Northwestern University and NBER

December 2008

(Forthcoming, New Palgrave Dictionary of Economics)

Abstract

Recent empirical analysis suggests that individual national leaders can have large impacts on economic growth. Leaders have strongest effects in autocracies, where they appear to substantially influence both economic growth and the evolution of political institutions. These findings call for increased focus on national economic policies and the means of leadership selection, among other issues.

I. Introduction

In the large literature on economic growth, the role of national leaders has received relatively little attention. Yet the imperative for such work is increasing: recent empirical evidence suggests substantial roles for individual leaders in explaining national economic growth as well as national institutional change, which can further influence the growth environment. This article considers the case for studying growth from a leadership perspective, reviews the primary econometric evidence, and discusses open questions.

II. Why Study Leadership?

To frame this question, first consider two opposing views of individual leaders in historical reasoning. At one extreme, the "Great Man" view of history, classically associated with Carlyle (1837), interprets major events largely as consequences of the idiosyncratic actions of a few individuals. At the opposite extreme, classically associated with Tolstoy (1869) and Marx (1852), individual leaders play little or no role; rather, historical events are understood much more deterministically as the contest of broad social and technological forces. This latter view gained substantial traction in the 20th Century throughout the social sciences. The apparent inevitability of World War I and Butterfield's (1931) condemnation of earlier historical reasoning promoted the new paradigm, in which individual leaders would play muted roles. Modern theoretical implementations have provided potentially decisive constraint on leaders through median voter theory (Downs 1957). More broadly, the presence of "veto players", through opposing political parties or the checks and balances of multiple institutions, can be seen to severely limit an individual leader's actions (Tsebelis 2002).

The literature on economic growth has progressed mostly within this 20th century paradigm. Examinations of the fundamental causes of growth debate between institutions, culture, and geography, which typically operate without reference to the actions of particular personalities. While policy analysis also features in the growth literature, and some growth economists may imagine leaders indirectly as policymakers, leaders themselves are rarely the subject of focus. As one metric, the Web of Science shows that the keywords "economic growth" intersected with "property rights", "international trade", or "Sub-Saharan Africa" produce hundreds of papers each since 1955, while the intersection of "economic growth" with variants of "national leadership" produces only three papers.

Nonetheless, there are several reasons that leadership may be an important object of study in a growth context.

II.1 Institutional constraints are incomplete.

The constraints imposed on leaders from electoral pressures, opposition parties, independent legislatures and judiciaries all vary across countries. Autocracy, where these constraints are weak, is a common form of political organization. More generally, the modern growth literature has emphasized how the "rules of the game" vary across countries and that institutional differences can be powerful sources in explaining different development paths (see, e.g., Acemoglu et al. 2005). To the extent that the authority embedded in formal institutional rules and the authority embedded in individuals act as substitutes, the increasing visibility of institutional variation in explaining development paths may directly motivate leadership studies.

Classically, Weber's theory of leadership suggests just this point: leaders can have substantial influence, but only when other institutions are weak (Weber 1947). In a modern theoretical context, information asymmetries, commitment problems, and limited liability all suggest agency for individuals that may be substantial depending on the local rules of the game. In a modern empirical context, several studies have suggested leader agency in sub-national political environments (e.g. Kalt and Zupan 1984, Besley and Case 1995; Levitt 1996), and in corporate environments (e.g. Johnson et al. 1985; Bertrand and Schoar 2003).

II.2 Theory suggests numerous roles for a national decision-maker.

Theories of economic growth that emphasize public goods (e.g., infrastructure, education, health), national policies (e.g., international trade, monetary policy), or national-scale complementarities (e.g., big push mechanisms) all suggest possibly important roles for a national leader. Furthermore, the capacity of leaders to make war or to pursue systematic corruption suggests other means of economy-wide influences.

II.3 Economic growth has substantial medium-run volatility.

Empirically, economic growth within countries is extremely volatile, with one decade's growth rarely looking much like growth the decade before. The correlation in mean growth across consecutive decades within countries averages only 0.3 in the world sample (Easterly et al. 1993) with countries regularly experiencing substantial medium-run growth accelerations and growth collapses (Hausmann et al. 2005, Jones and Olken 2008). To explain such volatility, it is natural to look at influences that change at appropriate frequencies. National leaders, who change sharply and at relevant time scales, are one place to look.

III. The Empirical Evidence: Do Leaders Matter?

Identifying a causative effect of leaders on economic growth is challenging. Even if particular leaders and particular growth episodes are associated, it may be that growth changes drive leadership changes, without a causative effect of leaders. In fact, empirical evidence demonstrates that coups are less likely when growth is good (Londregan and Poole 1990) and that U.S. presidents are less likely to be re-elected during recessions (Fair 1978).

Jones and Olken (2005) attempt to avoid this identification problem by examining cases where a leader's rule ends at death, due to either natural causes or an accident. In these cases, the *timing of the transfer* from one leader to the next appears unrelated to underlying social and economic conditions. By examining all leader deaths since World War II, Jones and Olken (2005) test whether leaders have a causative impact on growth.

As one example, Figure 1 presents the growth path for China from the Penn World Tables. The dashed vertical line indicates when a leader comes to power, and the solid vertical line indicates when the leader died. In China, we see that Mao's rule was closely associated with poor economic growth, averaging 1.7 percent per year. After his death, growth averaged 5.9 percent per year. The Cultural Revolution and the forced collectivization of agriculture were among many national policies that likely limited growth during Mao's rule, while Deng, who came to power in 1978, is often regarded as having moved China towards more market-oriented policies.

While the dramatic change in growth after Mao's death may suggest leader effects, this is one example and it could be a coincidence. Jones and Olken (2005) analyze all 57 cases of

natural and accidental deaths in the world sample and test, on average, whether growth changes in an unusual fashion when leaders die. This approach rejects the hypothesis that leaders have no influence on growth. Moreover, the point estimates suggest substantial effects. Under the assumption that leader quality is independently drawn across leaders, one standard deviation of leader quality is associated with a 1.5 percentage point difference in the annual growth rate – a large effect.

An important additional finding is that leader effects are strongest in autocratic settings, especially in the absence of political parties or legislatures. Meanwhile, the hypothesis of no leader effects cannot be rejected in democratic settings. The findings are therefore quite consistent with Weber's theory of leadership, where leaders can matter substantially but only when they are unconstrained. These results point to an important intersection between institutions and individuals in understanding growth paths.

Further evidence about the relationship between individual leaders and political institutions is found in Jones and Olken (2009), which studies the effect of assassinations. That paper estimates the effect of assassination-induced leadership change by comparing cases where leaders were killed in assassination attempts with cases where leaders survived assassination attempts. The key identification assumption is that, conditional on a weapon being discharged in pursuit of killing a leader, whether the leader survives the attack can be treated as plausibly exogenous. The main finding with this approach is that the assassination of autocrats substantially increases the probability of democratization, with democratic transitions occurring at three times the background rate. Once again, the finding is limited to autocracies, with assassination of leaders in democracies provoking no institutional change. Together, these findings suggest that institutions influence the impact of national leaders, and that national leaders can also influence the path of institutions. The constrained leader – the democrat – may have important degrees of agency, but at the level of national economic growth or the national political system, there is little evidence for an effect. The unconstrained leader – the autocrat – is seen as a powerful force in explaining the growth path, and a powerful force in the evolution of the political system.

IV. Open Questions

If leaders matter to economic growth, then many further questions are raised. To close this article, I briefly consider some of the open issues.

Do leaders act merely to obstruct growth, or do they actively promote it? In one view, leaders are essentially destructive – highwaymen along the road to economic riches. The tendency to steal, corrupt, and make war are means through which leaders can adversely affect growth and may describe numerous leaders, such as Charles Taylor of Liberia or Mobutu Sese Seko of the former Zaire. In this view, economies would grow well in the absence of such interference. In another view, leaders can be actively good for growth – e.g. by investing in public goods, choosing pro-growth trade policies, or overcoming national-scale coordination problems. Lee Kwan Yew of Singapore might suggest such a view. Anecdotal assessments aside, whether leaders can be good, bad, or both is an open empirical question.

Related, questions of how leaders influence growth are intimately related to the role of national policies in explaining growth. Since leaders matter, the decisions they make – i.e., their policies – appear to matter. (The converse is not true: policies might well matter even if leaders

don't – if national policies are purely the expression of broader social forces.) While convincingly identifying key policies has proven difficult, and some authors doubt that national policy matters much (e.g. Easterly 2005), the findings of Jones and Olken (2005) motivate a renewed focus on policy choices. Put another way, the findings of substantial growth effects tied to individual leaders implies that growth is not purely deterministic but rather substantially within contemporary hands. While the empirical growth literature has had substantial success explaining worldwide income differences based on deep, historical determinants (e.g. institutional inheritances), the distant hand of history explains only a portion of the variance in modern incomes. When asking *how do we make poor countries rich?*, the unexplained, nondeterministic part of growth variation becomes especially relevant and, given the results about leadership, more within reach.

Additional questions surround the selection of leaders. Econometric studies have provided some lessons at the village and municipal level. Research in India (Chattopadhyay and Duflo 2004) exploits randomized reservations of village council seats for women to demonstrate that gender matters for the types of public goods provided. Research in Brazil (Ferraz and Finan 2008) employs regression discontinuity design across municipalities to demonstrate that higher wages attract greater numbers of candidates, more educated candidates, and electoral winners who fund more public goods. Much more work is needed along these lines, especially in autocratic settings. At the national level, it would be helpful to identify key observable characteristics that can separate good from bad leaders ex-ante of their assumption of authority. A related subject is the design of institutional systems to produce the right kind of national leaders, i.e. institutional rules or other national features that attract well-intentioned, capable social planners rather than the simply vainglorious, or thieves. The door is open for creative

empirical and theoretical explorations of these issues. Given the large effect that leaders appear to exert on economic growth, these more detailed questions become first-order subjects in understanding the growth process.

Bibliography

- Acemoglu, Daron, Simon Johnson and James Robinson, "Institutions as the Fundamental Cause of Long-Run Growth," in the *Handbook of Economic Growth*, Philippe Aghion and Steven Durlauf, eds., 2005.
- Bertrand, Marianne and Antoinette Schoar, "Managing with Style: The Effect of Managers on Firm Policies," *Quarterly Journal of Economics*, CXVIII (2003), 1169-1208.
- Besley, Timothy and Anne Case, "Does Political Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits," *Quarterly Journal of Economics*, 769-98, 1995.
- Butterfield, Herbert, The Whig Interpretation of History (London: G. Bell and Sons, 1931).
- Carlyle, Thomas, The French Revolution: A History (London: Chapman and Hall, 1837).
- Downs, Anthony, An Economic Theory of Democracy (New York: Harper and Row, 1957).
- Duflo, Esther and Raghabendra Chattopadhyay, "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India," *Econometrica*, LXXII (2004), 1409-1443.
- Easterly, William, Michael Kremer, Lant Pritchett, and Lawrence H. Summers, "Good Policy or Good Luck? Country growth performance and temporary shocks," *Journal of Monetary Economics 32*, pp. 459 483, 1993.
- Easterly, William, "National Policies and Economic Growth: A Reappraisal," in the *Handbook* of *Economic Growth*, Philippe Aghion and Steven Durlauf, eds., 2005.
- Fair, Ray C., "The Effect of Economic Events on Votes for President," *The Review of Economics* and Statistics, 159-173, 1978.
- Ferraz, Claudio and Frederico Finan, "Motivating Politicians: The Impacts of Monetary Incentives on Quality and Performance," mimeo, University of California at Los Angeles, 2008.
- Hausmann, Ricardo, Lant Pritchett, and Dani Rodrik, "Growth Accelerations," *Journal of Economic Growth*, 303-329, 2005.

- Johnson, W. Bruce, Robert Magee, Nandu Nagarajan, and Harry Newman, "An Analysis of the Stock Price Reaction to Sudden Executive Deaths," *Journal of Accounting and Economics*, 151-174, 1985.
- Jones, Benjamin F. and Benjamin A. Olken, "Do Leaders Matter? National Leadership and Growth Since World War II." *Quarterly Journal of Economics*, 120(3): 835-864, 2005.

, "The Anatomy of Start-Stop Growth," *The Review of Economics and Statistics*, 90 (3), 2008.

- _____, "Hit or Miss? The Effect of Assassinations on Institutions and War," *American Economic Journal: Macroeconomics*, forthcoming 2009.
- Kalt, Joseph P. and Mark A. Zupan, "Capture and Ideology in the Economic Theory of Politics," *American Economic Review*, 279-300, 1984.
- Levitt, Steven D., "How Do Senators Vote? Disentangling the Role of Voter Preferences, Party Affiliation, and Senator Ideology," *American Economic Review*, 425-441, 1996.
- Londregan, John and Keith Poole, "Poverty, the Coup Trap, and the Seizure of Executive Power," *World Politics*, 151-183, 1990.
- Marx, Karl, "The Eighteenth Brumaire of Louis Napoleon", Die Revolution (New York), 1852.
- Tolstoy, Leo, War and Peace, 1869.
- Tsebelis, George, Veto Players: How Political Institutions Work (New York: Russell Sage Foundation, 2002).

Weber, Max, The Theory of Social and Economic Organization (New York: Free Press, 1947).

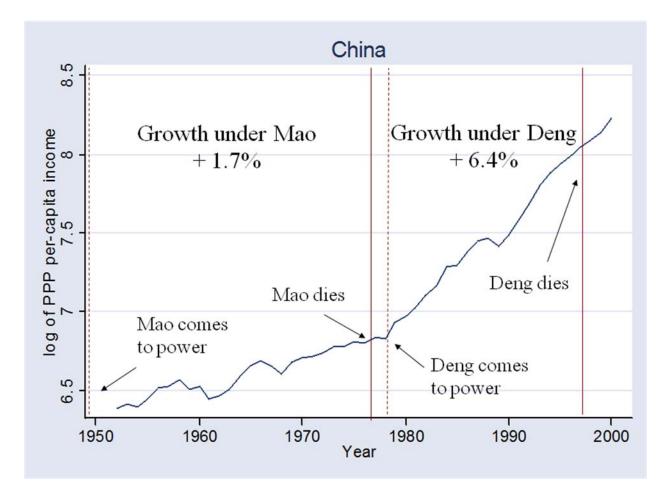


Figure 1: Growth in China under Mao and Deng