

An Option for Fast and Effective Monetary Policy: Using Variations in Public and Private Productivity to Stimulate Borrowing

By Lloyd S. Etheredge^{1 2}

Proposal: Analyze variations in productivity across similar public and private organizations. Rank the investments that will raise the productivity of each organization to the best of its type. Make a persuasive case that these investments, begun now, will be in the rational self-interest of these organizations. Designate \$100 billion in near-0% loans to companies, and to state and local governments, who will borrow to make these investments in the next 18 months.

Discussion:

- Provide Missing Information and Persuade Organizations to Act in Their Rational Self-Interest. This proposal applies two lessons from America's early and spectacularly successful learning system that combined the scientific method and the new science of sociology to raise agricultural productivity. (Farmers and farm laborers were 72.5% of the US workforce in 1870 and 1.6% by 2009, with abundant surpluses for export.)³ While rational self-interest of farmers was assumed, planners also diagnosed needs for new (and missing) information and persuasion. They built a national network of agricultural extension services and links to state universities and deployed field agents who would know each farmer, teach them about data and new discoveries, become trusted, persuade them to innovate, and help them to adapt new discoveries to local conditions. Now-classic research in sociology laid the foundations for implementation science and modern marketing (e.g., Rogers, Diffusion of Innovations; the two-stage model of opinion leadership; the "J" curve.)⁴
 - o There are exciting implications: **This model predicts that stimulus borrowing and economic recovery will go much more quickly: 1.) If the public and private sectors are fully informed about their options for good productivity upgrade investments; and 2.) If they are persuaded to make these investments in their rational self-interest now, regardless of other considerations.**
- Initial Databases Are Available to Compare the DNA of Organizations and Their Productivity. Our equivalent of genetics-based, Everything Included, NIH databases to map differences in public and private productivity is based on the Toyota production/Baldrige Award method of deconstructing public and private organizations into hundreds, even thousands, of separate processes. Jack Grayson, who built the www.apqc.org database, has estimated that there is a (surprising?) 3:1 to 5:1 variation in productivity across state and local government programs in the United States. And that productivity in the private sector falls-off substantially below the top echelon of companies in each area. If these estimates are correct, extraordinary improvements might be

achieved by supplying a comparative analysis and effective persuasion.⁵ [Discovering a 3:1 to 5:1 variation implies an agenda for improvement that voters are likely to support.]

- Other Usable Knowledge Probably is Quickly Available. Other organizations have relevant data and might quickly suggest how to build the discovery process and identify priorities by sector: the National Governors Association; Department of Commerce; researchers who have studied management information systems; McKinsey and Co., Boston Consulting Group, and similar high-level consultants; business and public policy school faculty who consult with different organizations.^{6 7}
- Genetic Discoveries and Breast Cancer: All of the Causes and All of the Usable Pathways. We do not yet know what discoveries are in the data. There may be a clear set of priorities for each type of organization. For example: A full genetic analysis of 560 breast cancer cases has yielded 93 genes (of 20,000) whose mutations can cause breast cancer; however, 60% of the variations occur in just 10 genes.⁸
- The regional Federal Reserve Banks might be good institutions to develop this idea. However, this kind of policy upgrade falls between the stools. It will require designating and funding one or more institutional mechanisms to bring together the data, discovery, and implementation functions.
 - Incentives for Salesmanship? Concerning the task of persuading public and private organizations and their constituencies (e.g., Governors, Boards of Directors, voters) to act in their rational self-interest, regardless of other considerations: Since successful monetary policy, stimulus, and faster growth are urgent public goods for the US and other G-20 nations, it might be worthwhile to pay commissions to brokers, consultants, and other intermediaries who can sell the loan packages. (To build the trans-continental railroad quickly in the 19th century – a national public good – the US government paid \$16,000, \$32,000, and \$48,000/mile bonuses and made other vivid and public incentive payments to entrepreneurs.)
- Politically, it might be better to begin with small and medium-size businesses, and state and local governments (i.e., investments that could save money for taxpayers).⁹
- Grayson's rule of thumb is that fast 20% upgrades are possible from low-hanging fruit.¹⁰ Even a 20% average productivity increase in American public and private organizations translates into a remarkable potential increase in average personal income.
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- A new and evolving rapid learning system along these lines might be worthwhile as a long-term investment. Major productivity increases can raise the potential real income of the American family – and the very good and hopeful news is that this may be possible without new leading edge technologies (e.g., Gordon, The Rise and Fall of American Growth).¹¹ In the public sector, major productivity growth will be required to maintain the current level of government services

in the painful times ahead. [CBO estimates that interest on the national debt will rise, within four years, from \$250 billion/year to \$500 billion/year assuming that the benchmark Treasury 10-year Treasury rate will reach 4.1% by the end of 2019 (at the low end of its historic distribution).]¹²

DRAFT – 5/10/2016

Notes

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² This paper continues a series of ideas from the Rapid Learning Economics Project, suggesting how an inclusive social science framework – e.g., the new science of learning systems - can support multi-disciplinary economic science and policy, and new options to accelerate economic recovery.

³ Robert J. Gordon, The Rise and Fall of American Growth (Princeton NJ: Princeton University Press, 2016), p. 53.

⁴ Everett Rogers, Diffusion of Innovations (NY: Free Press, 1962). There is another good example of “adding variables:” the increased effectiveness of national security policy that ended the Cold War and nuclear arms race. Thomas Schelling and others are justly honored for their rational actor contributions and the “logic” to use rewards and threats to achieve security. However, the possibility of building on this foundation and moving beyond the rationalist Mutual Assured Destruction framework, and ending the Cold War, emerged from a framework with additional mechanisms for relationship-building and persuasion. For the larger set of ideas actually used by Secretary of State George Shultz and other practitioners, see Ithiel de Sola Pool, “Deterrence as an Influence Process,” in Dean G. Pruitt and Richard C. Snyder, Theory and Research on the Causes of War (Englewood Cliffs, NJ: Prentice Hall, 1969, (pp. 189-196), Lloyd Etheredge, “On Being More Rational Than the Rationality Assumption: Dramatic Requirements, Nuclear Deterrence, and the Agenda for Learning,” in Eric Singer and Valerie Hudson (Eds.), Political Psychology and Foreign Policy (Boulder, CO; Westview Press, 1992), pp. 59-75, and the work of Alexander L. George (exemplified in the US-Iran nuclear deal) to evolve a refined science of “coercive diplomacy” with a reduced role for threats and fear, a recognition of ambivalence, etc.

⁵ Grayson, personal communication. See also the process-analysis comparisons for public education by Harold Kwalwasser, Renewal: Remaking America’s Schools for the 21st Century (Lanham, MD: R&L Education, 2012).

There are grounds to believe that Grayson might be right about the range of improvable variation in government programs. Two American sectors now are recognized to spend twice as much per patient/student as other countries with about the same (or, in education, sometimes poorer) results.

⁶ The largest and best-run companies (who already might have the expertise taught at leading business schools, use the best consultants, and be well-informed) – e.g., Amazon, Wal-Mart, Google, Exxon, Microsoft – are likely to be global leaders in productivity and have cultures that push for continuous, competitive improvement. The exciting possibility for a highly successful monetary policy, and a faster recovery, depends on the distribution of everyone else.

⁷ My earlier memorandum, “A New Theory of Economic Stimulus: The Example of a Rapid Learning Education System,” May 1, 2016 identified a higher, *system-level investment* to improve learning rates and productivity of an entire sector. Similar public goods investments in other sectors also might be identified by these consultations.

⁸ Serena Nik-Zainal et al., "Landscape of Somatic Mutations in 560 Breast Cancer Whole-Genome Sequences," Nature, May 2, 2016. Online.

⁹ Selecting the metrics to compare public sector productivity is a key choice. State Motor Vehicle Departments can become highly efficient in using their workforce if they create long lines, but this poorly serves the public.

¹⁰ For the rest, process re-engineering takes longer and requires sustained motivation and leadership, access to Best Practice databases, etc.

¹¹ *Op. cit.*

¹² Binyamin Appelbaum, "Trump's Idea to Cut National Debt: Get Creditors to Accept Less." The New York Times, May 7, 2016.