

KEYNESIANISM AS FULFILLMENT

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Abstract. The Keynesian Revolution is widely recognized as one of the most remarkable episodes in the history of the economics profession. Within the span of just over a decade Keynesianism had swept the economics profession. This paper sheds light on the Keynesian Revolution by framing it in terms of the supply and demand of economists. The emphasis here is on the shift in the demand for expert economists around the turn of the century. Progressive reforms of American government resulted in an active, professionalized state that sought the advice of experts in order to scientifically solve social problems. Keynesianism enabled economists to enter the public service as advisors to stabilization policies that came out of the Progressive reforms.

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INTRODUCTION

"The Keynesian Revolution is one of the most remarkable episodes in the entire history of economic thought; never before had the economics profession been won over so rapidly and so massively to new economic theory, and nor has it since." (2005, p. 642) The goal of this paper is shed light on the Keynesian Revolution and its "rapid and massive" nature by contextualizing the economics profession within the broader institutional transformations that occurred at the turn of the twentieth century in order to account for the timing and exuberance with which Keynesianism triumphed.

Within the American economics profession around the early 1900s, economists were seeking greater influence and respect, as well more general applicability of their science. Unfortunately for those economists, they would have to wait about another 30 years. The American institutional setting was not yet especially favorable to experts and besides, the limited nature of government at the time would not have resulted in a very prestigious partnership, even if politicians had been seeking economists' advice. But all of this would soon change.

The Progressive movement around the turn of the century sought to apply active government combined with scientific administration to the solution to social problems . Their reforms were gradual and took place over the course of a few decades. Slowly but surely, government took on an increasing role in steering the American economy towards the Progressive ideals and experts were sitting at the helm. After the First World War, America was set on course towards federal economic management partnered with economic expertise. Irving Fisher described the situation in 1918 to the American Economic Association:

It therefore becomes each of us, as we pause on the threshold of a possible "new world," to consider what are the new opportunities and what the new duties which lie before us. That new world of which we are all speaking is still unbuilt. Is it to build itself, unplanned, or is it to have

architects? And are we to be numbered among the architects? These are undoubtedly some of the thoughts and hopes and fears which stir us today. It is argued in this paper that the Keynesian Revolution was a culmination of these trends.

With the responsibility to maintain employment, the federal government sought the advice of experts. Keynesianism enabled economists to fill that role. By contextualizing the Revolution within these events we are better able to understand the timing and exuberance with which Keynesianism swept the profession. The paper proceeds by first reviewing the Revolution and the nature of Keynesianism and that puzzles of the event. The remainder of the paper then documents the demand for economists that arose out of the professionalized and active state, and economists' supply of expert economic advice.

THE KEYNESIAN REVOLUTION

Keynes published his book, *The General Theory of Employment, Interest and Money* in 1936. A year prior, he had written to George Bernard Shaw and prophesied the revolutionary nature of his book: "I believe myself to be writing a book on economic theory which will largely revolutionise - not, I suppose, at once but in the course of the next ten years - the way the world thinks about economic problems" (White L. H., 2012). If he was wrong, it was only in underestimating how quickly his book would overturn the economics profession.

The beginning of the revolution is relatively easy to set at the publication of Keynes' magnum opus, but it is not as obvious how to date the completion of the revolution. As Blaug suggests, one way is to look at introductory textbooks. Popular textbooks offer a window into the ideas that economists largely take for granted in their everyday research. Lorie Tarshis is credited with publishing the first textbook that expounded Keynesianism in 1946. Shortly after, Paul Samuelson published his textbook, *Economics*, in 1948. Samuelson's textbook would go on to become the most widely used introductory textbooks of all time (Blaug, p. 643). And

Samuelson wasted no time getting into Keynesian economics. In fact, the first half of the book is devoted to aggregate demand analysis while the standard supply and demand analysis is only introduced after over 400 pages (Samuelson P. A., 1948). Thus, by this measure, it's fair to say that in just over a decade Keynesian economics had swept the profession.

The Keynesian Revolution also extended beyond the economics Profession; Keynes had a political influence. Up through the first New Deal, the influence of Keynes on American politics was negligible (Currie, 1978, p. 541). Advocates of counter-cyclical spending had long pushed their ideas onto the federal government, but with little success. Keynes' book was seen as confirmation of these prototypical ideas just as soon as those ideas were gaining traction. As early as 1938, Roosevelt enacted a program of increased spending in the face of projected deficits. The policies were not explicitly Keynesian, but Roosevelt did use language that was very similar to a Keynesian full-employment analysis when he defended the policies in public. By 1946 the Employment Act had been passed which put employment and inflation under federal responsibility. The explicit Keynesian language was removed from original formulations of the bill, but we can still see this as a Keynesian advancement on the political front even if it was not yet a complete victory. That victory came in 1964 under John F. Kennedy. As Buchanan and Wagner describe it: "if a single event must be chosen to mark the full political acceptance of the Keynesian policy gospel, the tax cut of 1964 stands alone" (1977, p. 50). This tax cut was made based on an explicit national income target, in the face of a deficit, and defended on "almost purely Keynesian grounds" In the next year, Time magazine put Keynes' face on the cover and proudly titled the article inside *We Are All Keynesians Now* (1965). We can see then that the Keynesian Revolution was not just a revolution in economic thinking, but was tied up with broader transformations of the state in society. But before discussing the political aspects of

Keynesianism, it is important to discuss *what*, if anything, was theoretically revolutionary about Keynesianism.

Keynes began his book, and the revolution, by distinguishing himself from 'the classical' thinkers in economics. For Keynes, these scholars had been too faithful in the market's ability to self-correct. Where the 'classical' economists believed that "all is for the best in the best of all possible worlds provided we will let well alone" (p. 33), Keynes saw more clearly the affects of an array of market imperfections from price stickiness to uncertainty. The word 'classical' is put into quotes here to point out the inaccuracies of this description. Keynes used the term broadly to lump together nearly all of the economists that came before him, with the exception being those with whom he lumped himself: Malthus, Marx, Gesell, and Major Douglas (p. 32).

Keynes, like the thinkers he aligned himself with, rejected the self-correcting mechanisms of the market. The interest rate no longer cleared the market for savings and investment, so individual increases in savings reduced aggregate demand because they did not translate into increased investment. Instead, it was changes in income that equilibrated the system. Further, wages could not be expected to adjust to clear the market for labor. In Keynesian theory there is thus no tendency for the market to reach the full-employment level of output. As Mark Blaug's describes it, the rise of Keynesianism reflected a new perspective on the functioning of the market and the role for government:

Equilibrium for the economy as a whole now involved 'unemployment equilibrium' and the introduction of this oxymoron involved a profound change in the 'vision', *Weltanschauung*, paradigm - call it what you will - of orthodox economics, which undoubtedly included the faith that competitive forces are capable of driving the economy towards a steady state of full employment without the assistance of governments. (Italics in original) (2005, p. 675)

Keynes' argument went further than just market failure though; imperfections in the market had been recognized since Smith. The straw man presentation of his intellectual opponents enabled Keynes to gloss over, and even ignore, important aspects of pre-Keynesian economics. Smith, for instance, never argued that the market works perfectly in the absence of government. In fact, Smith argued in favor of the need for government in terms of public goods production (1776 [1991 ed.], p. 466). But more fundamentally, Smith's economic analysis recognized the importance of institutions as rules of the game. Institutions, for Smith and other classical liberal thinkers, are important not only for the market and the ways in which a system of private property rights provides knowledge and incentives to market actors, but they are also important for the design of government and the knowledge and incentives facing political actors. Smith mocks the man of system who

is apt to be very wise in his own conceit... he does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. (1790, p. VI.II.42)

The institutional and micro-foundational issues here raised by Smith were ignored by Keynesianism and would evoke the damning criticisms that would later come from Milton Friedman and Robert Lucas. Keynesianism ignored the institutional contingency of economic action. Keynes, and the macroeconomics which he is credited with founding, focused on the relationships between aggregate variables and ignored the microeconomic actions that produced them and the institutional foundations in which they took place. From this machine-like perspective on the economy, the system appears predictably manipulable. The Keynesian Revolution wasn't just a shift away from the perspective that the market tends to self-correct.

Implicit in the Keynesian paradigm is the correctability of the market through government intervention.

The Keynesian paradigm was instantiated by the rise of IS-LM model, which came straight out of *The General Theory* as made famous by Hicks in 1937. There were many important threads in Keynes book, from uncertainty to dynamic adjustment, but it is significant that the IS-LM model became the mainstay of the Keynesian Revolution. As Hicks recognized, this model was really nothing new. At most, it was only a special theory to a general theory that was very similar to one already provided by Wicksell (p. 158). As has been recently argued by Laidler, all of the constituent parts of the IS-LM model can be traced back to economists before Keynes (1999). That is, it is not obvious that IS-LM really provided a revolutionary explanation of business cycles or the Great Depression.

More generally, Keynes' ability to explain business cycles and unemployment ultimately rested on the assumptions that the interest rate and the wage were not clearing the markets for savings and investment or labor. But this is unsurprising (Boettke, 2012, pp. 2-3). For economists since Smith, the puzzle was to explain how the price system worked to bring about the wealth of nations within a highly disorganized and imperfect world. We would thus expect a failure of the system, given a failure of the price mechanism. That is to say, economists before Keynes would have only accepted an explanation of the business cycle as satisfactory if the argument was made within the assumptions of a working price system. If there is any indication that a revolution had swept the economics profession, it's that Keynes was able to persuade so many economists by simply ignoring relative prices and private property rights.

But that is not to say that the IS-LM model didn't serve an important function. With a market that was prone to failure and a near moral imperative for government intervention, the IS-

LM model neatly provided a tool for fiscal authorities to solve the problem of market instability. The federal government could compensate for aggregate demand deficiencies by simply increasing spending or decreasing taxes. This tool would come to be presented as a policy menu from which politicians could choose to tradeoff inflation for employment (Snowdon & Vane, 2005, p. 141).

Economists had a central role in this process. Framing the model in terms of the national income accounting variables enabled economists to ride on the coattails of the recent statistical revolution and the ever increasing value that federal authorities were placing on the use of statistics. Not only did these variables make the model tractable, but they enabled economists to answer questions of 'how much', augmenting the air of scientific grounding that politicians of the era were seeking. The formalism of Keynesian economics coupled with statistics of national income accounting meant for economists that they could both remain scientific and provided economic advice to the state.

This new expert role, that Keynesianism opened up, was recognized as such by economists at the time. As Lorie Tarshis has since recollected, he wanted to be a doctor but entered economics somewhat arbitrarily - he was good at mathematics. However, the rise of Keynes was seen by him and his fellow graduate students as a kind of adventure, where they could be "doctors to the world" (Colander & Landreth, 1996, pp. 20, 51). Galbraith expressed similar sentiments when he said that "[w]e younger economists were, as I've said, all looking for an escape from the commanding horror of the times. We were comfortable, and we believed others should be too." So we can see why Blaug describes the Keynesian Revolution as "rapid and massive" or why Samuelson describes it as having the "unexpected virulence of a disease" (Samuelson P. A., 1946, p. 187), even though Keynesianism offered little novel explanatory

value. Keynesianism, and the role it enabled economists to take in society, added a level of prestige to economics that had never existed before. Economists no longer had to settle for being practitioners of the dismal science, but could now be saviors to society.

The same connections between Keynesianism and economists' role as experts was recently recognized by N. Gregory Mankiw. In his 2006 JEP piece, *The Macroeconomist as Scientist and Engineer*, Mankiw argues that the rise of Keynesianism and of macroeconomics was the result of engineers seeking to "solve practical problems" rather than "propose and test elegant theories" (p. 29). The tensions between the engineer economist and the scientist economist would influence the development of macroeconomics and the back and forth between the new classical and new Keynesian schools. The boundaries of these schools, according to Mankiw, would also determine who it was that headed off to Washington to advise the federal government.

[I]t is remarkable that the new Keynesians were, by temperament, more inclined to become macroeconomic engineers than were economists working within the new classical tradition. Among the leaders of the new classical school, none (as far as I know) has ever left academia to take a significant job in public policy. By contrast, the new Keynesian movement, like the earlier generation of Keynesians, was filled with people who traded a few years in the ivory tower for a stay in the nation's capital. Examples include Stanley Fischer, Larry Summers, Joseph Stiglitz, Janet Yellen, John Taylor, Richard Clarida, Ben Bernanke, and myself. The first four of these economists came to Washington during the Clinton years; the last four during the Bush years. The division of economists between new classicals and new Keynesians is not, fundamentally, between the political right and the political left. To a greater extent, it is a split between pure scientists and economic engineers. (p. 37)

Keynesianism enabled economists to enter government as experts in a way that they had never been able to before. The battles that have been waged more recently between the New Keynesians and New Classicals come down a difference in perspective as to the importance of microfoundations, expectations, and rules of the game. This stems from the Keynesian

abandonment of precisely these foundations. To some degree, the New classical argument is bringing us full- circle back to the economics of Adam Smith.

Finally, Robert Lucas described the Keynesian Revolution in very similar terms in a lectured titled *My Keynesian Education* given in 2003 and it is worth quoting him at length.

What [Keynes] hits on is that the government should take some new responsibilities, but the responsibilities are for stabilizing overall spending flows. You don't have to plan the economy in detail in order to meet this objective... I think this was a great political achievement. *It gave us a lasting image of what we need economists for.* I've been talking about the internal mainstream of economics, that's what we researchers live on, but as a group we have to earn our living by helping people diagnose situations that arise and helping them understand what is going on and what we can do about it. That was Keynes's whole life. He was a political activist from beginning to end. What he was concerned about when he wrote the General Theory was convincing people that there was a way to deal with the Depression that was forceful and effective but didn't involve scrapping the capitalist system. (Italics added) (p. 24)

Lucas recognized that lying beneath the surface-level theoretical changes that Keynes sparked (i.e. the rise of IS-LM) was a more fundamental transformation of the role of economist in society; economists became expert advisors to the state. With the state demanding the advice of economic experts, the Keynesian paradigm became all that much more attractive. Instead of studying the abstracted models of orthodox economics that relegated economists to the ivory tower, young students could now study Keynesian macroeconomics and have the potential to be "doctor to the world".

THE DEMAND FOR EXPERT ECONOMISTS

The remainder of the paper documents the demand for economists that grew out of the Progressive reforms. The argument is laid out in three parts. The first subsection describes the increasingly active federal government from the beginnings in the late nineteenth century through World War II. The second subsection documents the professionalization movement in

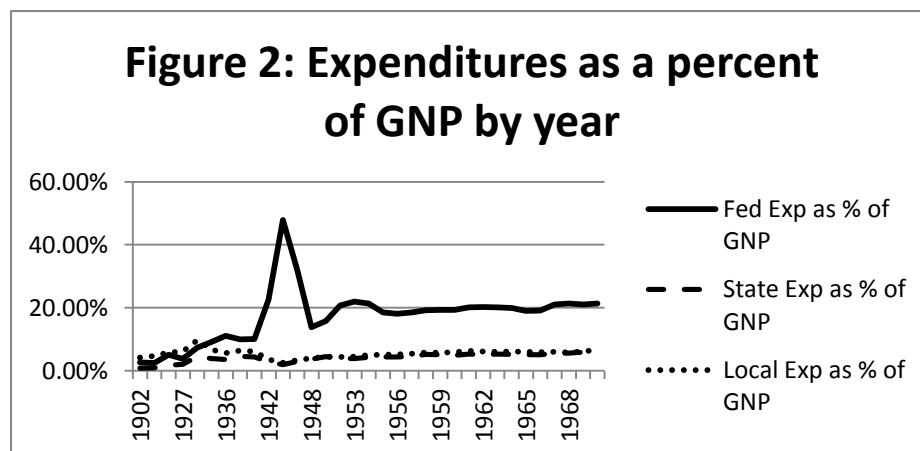
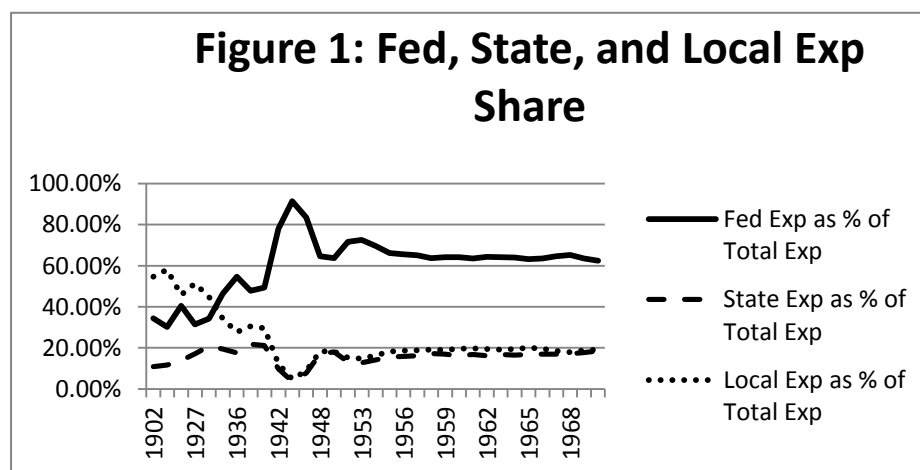
the federal civil service that filled the active state with experts. The third subsection documents the new role for economists in the federal government. The active state, looking to stabilize the economy, and seeking experts to advise it, created a demand that enabled economists to pursue economics as a science of social control.

Newly Acquired State Authority

The years between 1890 and 1920 typically date the Progressive era, which can generally be described as a movement to combine the state with science to improve the world. Their political rhetoric compared the motives and beliefs of "do-nothingism" to the "fervor and broad sympathy" held by "the men who stand for uplift and betterment of mankind" (Roosevelt, 1912) (Wilson, 1913) The Progressives believed that industrialization had marked the entrance of the U.S. into a new stage of history, a social stage. Government, as they saw it, had become enlightened; there was no longer a threat of tyranny or of the usurping of power. The problems that we faced as a society had also changed. The country had been founded in a setting of individualistic pioneers and a state of relative equality. "Business is in a situation in America which it was never in before", Wilson tells us, "it is in a situation to which we have not adjusted our laws. Our laws are still meant for business done by individuals; they have not been satisfactorily adjusted to business done by great combinations, and we have got to adjust them." Modernity demanded an active government that could solve contemporary social problems. (Pestritto & Atto, 2008) The Progressive movement began at local, municipal level and then spread to the state and national levels. With a perspective that social problems could be solved through centralized government, reforms of municipal public service swept the nation starting in the 1880s by the early 1900s the reforms were at the national scale. We can see this change graphically in figure 1. At the turn of the century, local expenditures as a share of total

expenditures were falling, while state and federal levels were rising. This is consistent with the Progressive belief that we had entered a new stage of history where we faced distinctly social problems that demanded social solutions.

For this paper, it is important that the federal government was becoming increasingly active not only in terms of its share of total expenditure, but as a share of total economic activity as well. The federal government's responsibilities as a share of GNP grew drastically at the same time. So not only were we seeing a shift in public authority from localized to centralized governments, but we were also seeing a massive shift in public versus private authority. This is shown in figure 2.



This data is important because it represents the magnitude of the demand for experts that would come about when this activism was combined with scientific ideas. However, the quantitative data does not adequately capture the nature of this activism. Not only was the federal government becoming a much larger part of society, there were also changes in *what* the federal government was doing. Those qualitative changes have important implications for the demand for expert economists as a subset of the general demand for experts. Economists would find their niche in the federal government, when economic stabilization became an important policy issue.

The federal Progressive reforms that took place prior to the 1920s generally revolved around the control of business. Federal anti-trust laws and railroad regulations began in the late 19th century and were strengthened under Theodore Roosevelt's administration. The period between 1910 and 1917 saw a continuation of this trend in new federal power. The 16th amendment was ratified in 1913, giving congress the power to tax income. The Federal Reserve Act was made law also in 1913. This period also saw the Federal Trade Commission Act and the Clayton Anti-Trust Act. This is of course not anywhere near an exhaustive list of legislation that passed during this time but is meant to illustrate the federal government's newly acquired aptitude to regulate business in order to solve social problems.

The trend culminated in World War I where the centralized war-time administration took on a wide scope of authority. The federal government regulated wages and hours worked and implemented large scale price controls on food and fuel. The Overman Act, passed in 1918, gave the President the ability to rearrange executive departments without the approval of Congress. Through this act Wilson was able to massively increase the powers of the War Industry Board, which then combined the powers of other agencies to control the production of private industries. Overall, the war time policies massively shifted the control of resources from the private sector

to the federal government. (Higgs, *Crisis and Leviathan*, 1987, pp. 123-159) Higgs' "ratchet effect" was clear, as post-war government never returned to its pre-war level. The war impacted the traditional view of the market/government relationship. With mobilization came a large increase in production. It appeared to reflect a gap between potential and actual output in the economy that administrative controls could eliminate (Barber, 1985, pp. 1-2).

Though the political rhetoric of the twenties advocated a "return to normalcy" following the war, the size and role of the federal government was far from pre-war levels. As Holcombe puts it: "[t]he advance of Progressivism may have been slower than before the war or during the New Deal, but a slower advance is not a retreat." (Holcombe, 1996) Particularly important for this paper is that during the 1920s we saw the rise of stabilization policy through Herbert Hoover. Hoover was a leading figure in the fight against business cycles and unemployment during this time. With the onset of the recession of 1921, the President convened the Conference on Unemployment, organized by Hoover. Hoover believed that there were at least two methods by which the federal government could and should smooth business cycles. The first was through information. Statistical knowledge, provided through the *Survey of Current Business*, would enable the business community to avoid speculative booms and busts in order to "iron out" the business cycle. The second, largely hammered out during the Conference on Unemployment, was the use of public works. In a manner similar to arguments that would be made post-Keynes, the publication supported the use of accelerated public works spending during times of recessions that had been postponed during the boom. While they used proto-multiplier arguments to make their case, they also argued that spending could only take place on projects that were publically valuable, that is, projects that would have taken place anyway but at a different time. Throughout the 1920s these discussions continued but the importance of using delayed public

works faded and borrowing was favored. However, Hoover insisted on the importance of balancing the budget. A compromise was made by planning to divert resources from sinking funds – the budgeted expenditures toward paying off war debts – to countercyclical spending programs. As an accounting trick this enabled emergency funds to be labeled as off budget, while the standard budget remained balanced. However, with all the tools ready, the boom of the 1920s delayed implementation of these policies. (Barber, pp. 7-65)

With Hoover as President, the onset of the Depression meant that he could implement his plans to eliminate business cycles. Quickly after the start of the Depression, Hoover initiated this spending program. He asked the various departments within the federal government to increase spending on projects they would have already pursued. He asked state and local governments to do the same. He also asked leaders of private industry to increase their capital investments. (Barber, pp. 78-92) This was an unprecedented role for the federal government and Hoover had few qualms about it. However, Hoover's presidency is often described today as passive or limited. In comparison to Roosevelt this is true, but that is only because of the magnitude with which the federal government's role in society increased under Roosevelt. Hoover, at least to some degree, believed in federalism and limited federal powers, so his groundbreaking policies were often voluntary; he *asked* state and local governments and private industry to increase spending. But that doesn't make the new role for the federal government in stabilizing the economy any less groundbreaking. So what we see then is that with the Great Depression the federal government expands massively, as illustrated in figure 1 and 2, but also that that expansion now included the policy goal of stabilizing the economy rather than more particular interventions of the earlier Progressives.

The same goal of stabilization was imbued into Hoover's other interventions as well. Hoover believed that generally higher wages could lead to recovery by raising consumer income and spending. Toward the end of 1929 Hoover called industry leaders to Washington to ask them not to lower wages. By striking a deal with industry and Union leaders, this high wage policy worked for a few years and arguable contributed to the persistence of high wages in the face of vast unemployment during the earlier years of the depression. As well, one of Hoover's campaign promises was to increase tariffs to protect farmers from foreign competition. He supported and signed the passage of the Smoot-Hawley tariffs in 1930, which raised tariffs to historic levels. The justification was that higher farm wages would lead to higher consumer spending and would bolster aggregate demand. The Smoot-Hawley act went further though and set up a Tariff commission that could adjust rates with the approval of the President. Hoover supported this provision and its ability to provide "prompt and scientific adjustment" that was "free from pressures inherent in legislative action" (Hoover, 1930). This perspective reflects the Progressive ideology that treats the problem as a scientific problem to be solved through efficient administration. Importantly, Hoover's presidency reflects a growing role for the federal government in stabilization policy even if the exact method wasn't yet worked out.

In retrospect, Hoover's presidency appears somewhat transitional rather than revolutionary, when compared to Franklin Roosevelt's presidency. Roosevelt's first 100 days in office "hold an unbroken record for governmental activism in peacetime." (Barber, 2006, p. 23) If Hoover's presidency was a transition, then Roosevelt's was the apex. The perception of the depression as an emergency enabled Roosevelt to dramatically increase the federal government's role in society. The creation of the National Recovery Administration, the Agricultural Adjustment Act, and Social Security, all reflect the new found role of the administration in

providing for public welfare. The creation of the NRA implemented a massive public works program which meant wide discretionary power for the president in allocating those funds. It also authorized the president to regulate industry based on 'fair competition', this meant regulating monopoly power, minimum wages, maximum work hours and so on. The AAA charged the administration with raising farm prices. The mechanism for doing so was vague, but gave the administration wide discretionary control of farm supplies and prices. Contrasted with Hoover and even more so with the Presidents that came before him, it is clear that Roosevelt's administration represented a dramatic shift in the role of government in American lives.

The recession of 1937 was a painful surprise. It followed Roosevelt's attempts to the balance the budget and therefore was seen as support for the Keynesian perspective (Currie, 1938). In 1938, Roosevelt embarked on a massive spending program. Hoover's and Roosevelt's administrations had already implemented numerous policies with the explicit intention of trying to promote recovery, however there were a couple of unique traits to this spending program. The first is that there was no attempt to balance the budget. The reasoning that was given to Roosevelt by his economic advisors was explicitly Keynesian and persuaded Roosevelt that the deficit could actually be used as a tool of fiscal management rather than being a burden on the economy. They estimated full employment output to be around \$88 billion, where actual output was about \$60 billion. Six billion in federal spending was predicted to be enough to close the gap. Further, it wasn't just spending in the face of a deficit but also had the explicit goal of raising national income. (Barber, 2006, pp. 112-115) Thus what we see with Hoover and Roosevelt is the beginning of the shift within the federal government to use fiscal policy to stabilize aggregate demand. It is arguable whether the 1938 policy was Keynesian, but it was clearly a policy intended to promote recovery in the face of deficits, based on the advice of

economic advisors who found themselves aligned with Keynes. More generally, there was little question that the federal government had a role to play in the depression and that that role must be based on scientific analysis, the open question was exactly *how* government could do this.

Like The First World War, The Second also involved centralizing administration and authority in the federal government. The important aspect of mobilization for the war, for this paper, was the huge increase in federal expenditures and fall in unemployment. This was interpreted in the same way as it was after WWI, that there was gap between actual and potential employment that the federal government could remedy it. However, the country now had the experience of the Great Depression to amplify the importance of this interpretation. Further, they also had Keynesian economic theory which predicted these outcomes and was increasingly being accepted by the economics profession. The same interpretation of the war was also used to justify Keynesian spending after the war in order to avoid unemployment (Samuelson P. A., 1944). Also, as in WWI, Higgs' ratchet worked here too. With the end of the war, the United States was left with a federal government that represented a larger portion of our society then it ever had before, and the belief in an economy that was prone to depression if government didn't intervene. In 1946, the Employment Act was passed, solidifying the federal government's responsibility to maintain employment.

In summary, the time period between 1900 and 1946 saw a dramatic change in the role of the federal government in American society. That change was both quantitative and qualitative. The magnitude of the federal governments expenditures as a fraction of GNP increased by over 500% and at the same time the stabilization was becoming an important policy goal. The increased political activism demanded the guidance of experts if policy was to remain true to the

Progressive ideal of active, scientific governance. As the state's role in stabilizing the economy expanded, that demand for experts would increasingly be extended to economists.

Professionalization of the Civil Service

A prominent theme that runs through the Progressive movement is the importance assigned to *scientific* governance. Where the previous section documented the increasing reliance on the federal government to solve social problems, this section will document the reforms that put science at the right-hand of the newly active state. Through the reform of the civil service, education and training became the necessary qualifications to work in the administration rather than political pull. Civil Service reform in the first half of the twentieth century created a demand for experts that had never existed before. This section relies heavily on the detailed historical study published by Paul Van Riper in 1953, *History of the U.S. Civil Service*. Van Riper has been recognized as an outstanding figure in the field of public administration over the twentieth century and, as such, offers a valuable window from which to view the history and importance of civil service reform¹.

Woodrow Wilson is often credited with founding the science and classical school of public administration with an 1887 paper in which distinguished politics from administration (Ostrom, 1973). Politics was a question of *what* while administration was a question of *how*. For the Progressives, democracy referred to political action based on the “will of the nation”. The legislature was charged with interpreting that will and success would be rewarded with votes (Wilson, Congressional Government; Pestritto & Atto, 2008). In contrast, administration was seen as completely apolitical. In line with his historical and constitutional perspective Wilson

¹ In 1990 he was awarded the Dwight Waldo award for having "made outstanding contributions to the professional literature of public administration over an extended career." Other winners of the award include Herbert A. Simon (1995) and Luther Gulick (1980).

argued that “the weightier debates of constitutional principle are even yet by no means concluded; but they are no longer of more immediate practical moment than questions of administration. It is getting to be harder to *run* a constitution than to frame one.” (1887, p. 200) Wilson believed that we could reform administration without political consequence. Administration is a business like venture, demanding efficiency, and amenable to expertise. As Pestritto and Atto put it, “administration, in contrast to politics, was about the ‘truth’” (Pestritto & Atto, 2008). The independence of politics and administration, for the Progressives, meant that increasing emphasis had to be placed on reforming the administration of governance if political reforms could be expected to be successful.

In line with these movements, the Pendleton Civil Service Reform Act was passed in 1883. This act was the product of increasing dissatisfaction with the government based on perceptions of corruption and inefficiency (Van Riper, 1958, pp. 74-75). An integral component of the corrupt public sector was the spoils system in the civil service. In general, the spoils system refers to the hiring and firing of civil servants based on their political views. A recently elected President could relatively easily fire and replace high level civil servants who served in the previous administration with new employees of his choice, who would then do the same thing to the next level of employees. It was seen as a kind of exchange where the party in power offered employment in the civil service and the employee would offer their vote and support for the party (p. 46). The result was that every time a party fell out of power, a large portion of the civil service was replaced. This system was perceived as being unfair and unequal, because only those who were in the appropriate political circle could participate in the administration of government, but also inefficient, as patronage made no guarantee of the scientific qualifications

of administrators. The goal of the Pendleton Act was to replace the spoils system with one where administrative employment was determined based on merit.

The effects of the act were seen slowly, through numerous administrations and subsequent acts. The act itself was based on a number of procedural ideals, that would lead to a merit based civil service. The act established a Civil Service Commission manned by three members who were appointed by the President with the approval of Congress. Along with the commission, the act set up competitive examinations that potential employees had to pass prior to civil service employment. Employees from different departments across the Executive were "loaned" to the Civil Service Commission in order to administer the examinations of their employees. By regulating hiring of the potential employees who scored the highest on the exams, the Commission hoped to ensure that the civil service would gradually come to reflect merit rather than patronage.

The merit system offered a suitable niche in the federal government for the expert. In terms of political pull, experts do not necessarily have anything to offer beyond the average person. Under the merit system, however, hiring is biased towards those with higher levels of training and education. Within this institutional system, experts have a comparative advantage in the market for federal jobs. Its extension would mean that experts, those with above average intellectual capital, in contrast to those with above average political capital, could increasingly find employment under the State.

The problem with the initial act in terms of the goal of replacing the spoils system was that the act pertained to only a small piece of the total federal government. These positions were labeled "classified" and those outside the requirements of the act were labeled "unclassified". The initial act only classified about 10% of the total civil service. However, the act enabled the

President to extend the "classified" label to other departments. A large portion of the civil service was still hired based on patronage. Therefore, the effects of replacing the spoils system would only be seen gradually over the next 60 years (for our purposes) through multiple additional acts and executive orders that redefined the classified civil service.

This set of rules incentivized politicians to extend the classified label to their constituents right before they left office, and that is what they did. At the end of Chester A. Arthur's term in 1886, he had classified some 15,000 positions, leaving 125,000 as unclassified and by the end of Grover Cleveland's second term around the turn of the century "close to 50 per cent of some 190,000 federal civil employees were under the merit system." By the end of Theodore Roosevelt's presidency classification covered 60% of the civil service. Finally, by 1930 Hoover had increased the classified civil service to nearly 80% of all federal positions.

All of this implied a greater demand for experts in the civil service. Early on, classification was not only limited to a small set of positions, but those positions also tended to be lower level. Gradually the Commission developed examinations for higher level positions. In the late 1890s the commission introduced "non-assembled examination", primarily in scientific positions, where experience and training substituted for written examinations. The demand for experts would only increase as government generally became more active and as scientific classifications were refined and advanced examinations were developed in the twentieth century.

Given Wilson's importance for the Progressive movement, it is worth briefly looking at his influence on the civil service. Wilson's presidency illustrates the incentives created by the merit system, and highlights the connections between Wilson and Franklin Roosevelt. Wilson supported the merit system in his campaign and shortly after his election he announced his plan to hire based on qualification alone. However, the extension of the merit system was really only

beneficial to a president at the end of his term. Extending the classification was a way to entrench the existing civil service. Also, aside from the entrenchment incentive, the cost of extending the merit system, in terms of reduced ease of political activism, is largely gone at the end of the term (Rothbard, 1995). Wilson gave in to these political pressures even though, he stated, "the matter of patronage is a thorny path which daily makes me wish I had never been born." (Van Riper, p. 234) However, even at the end of his presidency, where the incentive is to extend the merit system, opposing pressures prevented such reform. The emergency of the war and disarmament meant that civil service reform was to be put on hold (pp. 250-283). That is not to say that the Civil Service Commission did not have a large role to play in the War efforts. On the contrary, the massive mobilization of the civil service meant that the Commission was possibly even over extended. This mobilization would have a direct impact on the economics profession, which will be elaborated later.

By the time we get to Franklin Roosevelt's Administration we see a similar pattern of within the civil service classification system, though massively expanded. By the end of 1934 nearly 60 new agencies had been exempted from classification. "By 1936 only about 60 percent of a total federal public service of more than 800,000 was on the classified list." Along with this massive use of the patronage system, Roosevelt separated "in a way that had not been so thoroughly done before in American history intellectual policy-making from political-policy selling." Instead of looking to industrial and political leaders to formulate policy, as previous politicians had, Roosevelt was looking to "idea-men". As Van Riper describes, "[t]his phenomenon of the division of labor between the intellectuals and the politicians arose in part out of the tremendous pressures of the times, pressures which demand extraordinary political and social inventiveness...As these ideas became incorporated into the expanding New Deal, their

authors too became integrated into the public service through the encouragement of Roosevelt and those who could understand their importance and function." (pp. 324-326)

Knowing that these New Deal hires would only be temporary and, for that reason, would not attract elite talent, and encouraged by the recommendations from The President's Committee on Administrative Management, Roosevelt extended the merit system to cover these newly created agencies and more. The Ramspeck Act of 1940 authorized the extension of the classification system of nearly 200,000 positions, at the President's discretion. Through a number of executive orders in the early 1940s, Roosevelt did exactly that. "By 1943 approximately 95 per cent of the nearly 2,000,000 federal employees occupied positions under the "jurisdiction" of the Civil Service Commission" (p. 344). With this act, and a few others, the Commission had taken on a nearly completely centralized authority over the civil service (p. 386).

The Commission would again play an important role in terms of recruitment during the Second World War, except this time it was much better prepared. Important for this paper was the National Roster of Scientific and Specialized Personnel create by the NRPB. Under the jurisdiction of the Commission, the Roster enlisted a number of scientific societies to list potential personnel. "Altogether, it was estimated that at least 180,000 referrals and 50, 000 placements were made from the Roster." (pp. 375-376)

Thus, with the Great Depression and the Second World War, the merit system almost entirely replaced the patronage system in the Federal administration. Under the spoils system expert training had very little to do with being hired in the federal government. Of course, experts were occasionally hired outside the civil service, often simply because having an expert on staff lent credence to policy proposals. We will see some of that in the next section, economists who participated in government outside the civil service. However, the replacement

of the spoils system with the merit system meant that administrative hiring was no longer based on party patronage but on training, where experts had the competitive advantage. Thus, with the increased demand for experts in the federal administration, the quantity hired went up. What we will see is how that increase included economists, where economics could now be used as a tool from which to advise the active federal government.

Economists in Government

In 1902 Irving Fisher lamented the fact that “economists have altogether too little influence; they are too silent on public questions, and when they do speak their opinion commands less respect than it deserves.” (Bernstein, 2001, p. 15) Fisher, like other economists at the time, saw prestige and power in the partnership of economists and government. But that partnership would only grow gradually. Economists wouldn't find a large, permanent role in the federal government until the 1930s and WWII. This section documents that partnership and the increasing presence of economists in government.

There are two ways to illustrate the rise of economists in government that are used here. The first way will be to look at Civil Service Commission estimates of the number of positions labeled as 'economist' in the federal government. The benefit of this approach is that it captures the lower level research and statistical positions that economists were taking. The problem is that it is not clear how many of these positions should be labeled as 'expert', because not all of them required an advanced degree. Further, the primary source estimates from the Civil Service are not available to the author, so citations from other authors have to be collated. Nevertheless, the estimates provided a clear picture of the rise of government economists around the turn of the

century. The second approach is to look at the rise of more visible, top-level positions for economists. The merit in this approach is that it addresses the prestige that was increasingly being associated with the economics profession as well as economists' role in historical events, where Keynesian policy was gaining traction.

Leonard White, in a 1937 article discussing *New Opportunities for Economists in Federal Employment*, states that in 1896, not a single 'economist' position existed and only 87 statisticians were employed (p. 210). He also cites a 1931 study "that revealed 774 positions in economics and statistics, as the term is used in the official classification of the federal service." (p. 210) His own estimate was that between 1935 and 1936 new economics positions totaled 583, with 129 in statistics (p. 211). Because the 1931 estimate is a stock, we can compare these numbers by averaging the growth between 1896 and 1931 per year; over 35 years that is an average of less than 20 economics jobs added per year compared to 583 added in 1936. Of course, most of the early growth probably occurred much closer to the 1930s than the 1900s, but even if it occurred over a decade, that is still a substantial difference in growth. Harold Bowen's 1953 AEA study of graduate education in economics cites two separate studies as estimating the number of economists in government in 1938 and 1951 as 5,050 and 3,261 respectively (p. 13). The decline reflects the flight of economists from Washington back to academia after the War, but also suggests that even with disarmament, a permanent foothold had been made by large number of economists. This is confirmed by Barber's citation of the Civil Service Commission estimates of 1958 and 1978 as 3,012 and 5,763 respectively (1981, p. 195). Along these same lines, when Bowen asked supervisors of economists whether formal graduate training was essential for persons who expected to serve in the lower grades of the public service a majority answered yes. (p. 16) This data gives us a consistent picture of the rising demand for and supply

of economists in the federal government around the turn of the twentieth century. The data misses the meaning that was attached to these events and the prestige that came to be associated with the economics profession, but it is clear that an economics degree no longer necessarily led one into academia.

To see the meaning behind the rise of economists in government, we have to look at the interaction between the economics profession, the federal government, and historical events of the times. The first hint of an attainable expert status that economists saw, according to Bernstein, occurred during Wilson's presidency, however it was limited. The Progressive policies mentioned earlier (i.e. the Federal Reserve Act, the Federal Trade Commission Act, and the Clayton Antitrust Act) created federal arenas in which economists wanted to proffer their expert advice. Bernstein cites as an example Wilson's tariff policy commission. On the one hand, he appointed Irving Fisher, Ida Tarbell, and Frank Taussig to the commission. On the other hand, he also appointed, "among others, practical shipping men, one admiralty lawyer, one electrical engineer, and a lumber producer." (p. 50) What we see pre-WWI was the beginnings of the rise of the administrative state which included an increasing role for experts, but economists were not necessarily those experts.

WWI had both indirect and direct effects on the economics profession. Indirectly, the American Economic Association was working with the federal government as a representative of the economics community. The association set up committees to study practical problems that were directly relevant to the war effort rather than the standard abstract theoretical discussions. In doing so it was consciously reorienting the questions that economists were asking in order to make the profession more relevant. Further, part of the Civil Service Commission's strategy was to take advantage of professional associations as representatives of a community to find out who

was eligible for the civil service. They did exactly that with the AEA who, "with an explicit government request to do so...canvassed its members in the early summer of 1917 with a view toward providing the Civil Service Commission with a full census of the capabilities of its constituency" (Bernstein, 1990, p. 409). As Bernstein cites, the committee sought to classify those members who qualified for "economic expert" status. The point of this evidence is that young economists, who were about to begin developing their intellectual capital, could increasingly expect that their role as an economist could involve acting as an expert advisor to the state..

The war also had a more direct affect on the economics profession. Economists found employment in the federal government producing statistics. As Rothbard argues, statistics are necessary for the operation of centralized government operations. "Deprived of profit and loss tests for efficiency, or of the need to serve consumers efficiently, conscripting both capital and operating costs from taxpayers, and forced to abide by fixed, bureaucratic rules, modern government shorn of masses of statistics could do virtually nothing." (Rothbard, 1989) Statistics, like experts, were also seen as providing unbiased, scientific knowledge for government to promote social welfare. Therefore, it should be expected that statistics would come to play an increasingly large role under the increasingly active state. Rothbard cites Edwin Gay as a prime example of the war expert. First staffed on the Commercial Economy Board, Gay quickly rose in rank. "Gay had risen from a special expert to the unquestioned czar of a giant network of federal statistical agencies, with over a thousand researchers and statisticians working under his direct control." This quote is important because it reflects the fact that the visible government economists, i.e. those at the top, are really only the tip above an iceberg of lower level researchers and, especially at this time, statisticians.

While the political rhetoric of the twenties called for a 'return to normalcy', economists saw the postwar world in a different light. For them, the war had opened their eyes to the potential role that economists could play in managing the economy. In 1918 Fisher gave a talk to the AEA where he stated: "Of the many effects which the war has exerted on the minds of men, one of the most notable is the keener desire which we all now feel to be of genuine public service." (Fisher, 1919, p. 5) Fortunately for economists who agreed with Fisher, not all of the wartime agencies were dismantled. As described earlier, the use of statistics in the federal government was on the rise, particularly with the help of Hoover.

Two agencies were integral in the growth of statistics after the war, the National Bureau of Economic Research and the Institute for Government Research (Barber, 1985). The IGR was established during the war with the explicit purpose of providing expert economic advice to the administration. In 1927 it would merge with the Institute of Economics to become the Brookings Institute. In 1920 the National Bureau of Economic research was established after the war by Gay and Wesley Mitchell. In the same year, the secretary of commerce Herbert Hoover appointed an Advisory Committee on Statistics. The committee included Wesley Mitchell, Allyn Young, Walter Willcox, Carroll Dooten, Gay, and Seligman: "a formidable assemblage of talents which embraced some of the most respected names in American academic economics. (Barber, 1985, p. 8) In the year following, Gay and Mitchell were placed by Hoover on a committee to assist in the creation of the *Survey of Current Business*. Organizations and committees like these served to link the economics profession with the federal government. The growth of the use of statistics only strengthened the credibility and respect economists were gaining as experts. With Hoover's election, he employed a group of economists to write reports for his "task-force", as Barber describes it, which a Hoover-chaired committee would use to publish their own report

with the goal of informing and convincing the public of Hoover's economic plans. The group was directly affiliated with the NBER, having been appointed by Wesley Mitchell.

As the Depression dragged on, economists would increasingly find themselves in more visible, reputable, and influential positions in the federal government. Rexford Tugwell, who received his degree from Columbia University, worked on Roosevelt's 'Brain Trust'. Tugwell formulated the outlines of the NRA prior to entering public service. He would go to participate in the creation of the AAA and the NIRA. (White L. H., 2012, p. 102) Lauchlin Currie, a graduate of the Harvard PhD program, is another example of an economist who found influence inside the politics of the New Deal. Currie officially worked at the Federal Reserve but partnered with the Department of Commerce, where the National Income Accounts were being developed. From this vantage point, Currie set out to persuade the administration of the desirability of counter-cyclical spending. Currie was an early advocate of Keynesian type policies, even prior to *The General Theory*. By the end of the 1930s Currie's work had been persuasive enough to get him appointed to Roosevelt's White House staff as economic adviser to the President, the first appointment of its kind. At this point, Currie describes, the beachheads had been established; "the fiscal policy later known as Keynesian became a central piece of New Deal economic policy and the work of recruitment and placement of younger economists in the various agencies, in which I took an active part, continued." He goes so far as to say that "[e]ven if the other War had not intervened, I still feel that by 1940 the war over the responsibility of the State for employment and the use of fiscal and monetary policy to this end was well on the way to being won." (1978, p. 547) Currie's appointment in the White House was important in establishing the beachheads, because, like Tugwell in the Brain Trust or Mitchell at NBER, it represented the rising status of economists in government.

World War II, like the First World War, had a major impact on the economics profession. Economists were highly active in the federal government. Keynesian economics coupled with National Income Accounting statistics were used by economists across multiple departments to control prices, maximize wartime productivity, minimize inflation, all while supposedly increasing private consumption (See (Higgs, 1992) for the case against wartime prosperity). Again the Civil Service Commission asked the American Economic Association to classify its membership, asking also for credentials and specialties of all AEA members (Bernstein, 1990, p. 410). The major effect of the war and the participation of the profession was to solidify the status of economists, essentially granting them a monopoly on expert economic advice. Samuelson quite appropriately summed up this result:

It has been said that the last war was the chemist's war and that this one is the physicist's. It might equally be said that this is an economist's war. Especially in the business-as-usual period, but equally since, the Washington economist, whether recruited from the permanent civil service or from academic life, has done an excellent job, either in comparison with reasonable expectations or in comparison with business executive who have been called to the government service. At a time when the term bureaucracy is anathema, it is well to emphasize that no administration in history has commanded the services of men of equal zeal, honesty, or competence. (Samuelson P. A., 1944, p. 298)

In that 1944 *New Republic* article, Samuelson was addressing the public and attempting to persuade them of the coming post-war storm. In the same year Alvin Hansen served as the coordinator of the drafting committee which was assigned to create an American white paper on post-war full employment. The committee also included Arthur Smithies and Walter Salant, among others. Their proposal was for an administrative board composed of economists who would have discretionary control over fiscal policy in a fashion similar to the Federal Reserve's authority over monetary policy. The very fact that economists were assigned to draft such a bill

is telling. But Congress was not quite willing to grant such authority to an independent executive commission so the proposal was watered down and turned into the Employment Act of 1946.

The Employment act formalized the federal government's responsibility to maintain employment, and simultaneously created the Council of Economic Advisors. Where Currie's appointment in the White House was, no doubt, a significant event for expert economists, the creation of the CEA institutionalized a prestigious role for economists in the federal government. It is notable, as Barber points out, that no other discipline, even in the hard sciences, found such recognition and influence. (1981, p. 181) Therefore, by the end of the war economists had gained enough status to grant them a permanent role in the federal government. The CEA is still active today and as Mankiw argues, it has been a venue for macroeconomists looking to engineer the economy ever since. From 1946 onward, there was little in the way of a young economist who wanted to put his skills to work in the public service. And such an economist would have pretty good reason for wanting to do so, economists now had the opportunity to step out of the ivory tower away from the dismally abstract theories and into the public service where they could be "doctors to the world".

CONCLUSION

In his 1955 address to the American Economic Association, Frank Knight argued that the rise of Keynes had brought the economics profession back to the dark ages. Whether or not one agrees with this position it is clear that Keynesianism changed economics. Where orthodox economics had been primarily concerned with the workings of a system of exchange based in private property rights, Keynesian economics shifted the focus to aggregate, manipulable statistics. This paper has argued that this change was brought on by the new role that the active state and

professionalized civil service provided for expert economists. Keynesianism was a language through which economists could speak to the needs of political actors looking to stabilize the economy. Young economists took up Keynesianism with exuberance, inspired by the prestige and importance of saving capitalism and democracy.

Keynesianism allegedly saw its demise with the stagflation of the 70s and the critiques from Friedman and then Lucas. Those critiques echoed the micro foundational issues of which Smith was originally concerned. In this light, Knight was correct; if Smith brought us out the dark ages, Keynes brought us right back. The question is whether the Profession has really taken Smith's economics to heart. As Lucas pointed out, there is still an “agreed-upon view: we should stabilize spending flows, and the question is really one of the details about how best to do it. Friedman’s approach involved slightly less government involvement than a Keynesian approach, but I say slightly.” (2003, p. 23) The Keynesian paradigm of market failure and government intervention is still at the heart of a large portion of macroeconomics, as recognized by its leaders. Keynesian economists are still traveling to Washington to advise policy makers on how best to stabilize the economy. They were there before the 'Great Recession' and they remained after it. The reason we have recently seen the return of Keynes is because he never really left and without a drastic restructuring of our institutional system, we can expect that he'll stick around.

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