

Testimony to South Carolina Senate Finance Committee
On Long Term Inflation Expectations

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I have reviewed the report by actuarial consultants Gabriel Roder Smith (GRS) to the South Carolina Retirement System, specifically with regard to their recommendation that the assumed rate of inflation be reduced from its present rate of 3.0% to 2.75%. My testimony today is that of a professional economist who has studied monetary economics, monetary policy, and who has worked with data on inflation rates and interest rates for three decades. My testimony is based on my knowledge of monetary history, the evolution of monetary policy, the academic literature, and my own review of inflationary episodes over the last century. In short, I believe the recommendation from GRS to lower the assumption of expected inflation from 3.00% to 2.75% is well founded, and moreover that a strong consensus among professional economists exists which is consistent with lowered inflationary expectations.

The Federal Reserve was founded in 1913, and since then the policy decisions of the Fed have been the main influence on the inflation rate in the U.S. Since the founding of the Fed, monetary policy has evolved significantly, and our understanding of the influence of monetary policy on the economy has improved by leaps and bounds. This increased understanding, particularly with regard to the influence of monetary policy on short and long run economic outcomes, has led to several distinct inflationary regimes in the United States. We now live in a world where the likelihood that we repeat the mistaken monetary policies of the past is substantially reduced. This view is widely held among economists who study monetary policy, and is important to understanding the basis for a lowering the assumption for expected inflation in the long term in the U.S.

The various approaches of the Fed to monetary policy have resulted in four distinct inflationary episodes in the United States. These episodes are described in a table and several charts in the appendix to this testimony. The first period is one of high volatility in both inflation and deflation from 1914-1947. Many scholars who studied this period, most notably Milton Friedman and Anna Schwartz, attribute the volatility and especially the deflationary episodes to policy errors of the Federal Reserve in the first decades following its creation. Following World War II, a period of low inflation and low volatility in the inflation rate ensued. The third period consists of a breakout of inflation to high levels in the 1960s. Monetary economists, again led by Milton Friedman, argued that this too was the result of policy errors made by the Fed. A sustained disinflationary policy during the Volcker years was required to bring the inflation rate back to lower, satisfactory levels. By the end of 1981 this policy objective was within reach.

Following the inflation of the late 1960s and 1970s, central banks around the world adopted policy improvements designed to yield inflation rates which were both lower and more predictable. Many central banks now have statutory obligations to target their country's inflation rate, typically in the neighborhood of 2% per year. Although legislation in the United States (the Humphrey-Hawkins Full Employment Act of 1978) requires the Fed to weigh business cycle conditions as well as inflation when forming its

monetary policy, in practice the Fed's policy has evolved to a policy in which low and stable inflation is of paramount importance. This is reflected repeatedly in the minutes and the actions taken at meetings of the Fed's Open Market Committee. The minutes make constant reference to the record of inflation, inflationary expectations, and the influence of the Fed's policy actions on the inflation rate.

Improved knowledge of the impact of monetary policy on the economy has led to a beneficial evolution in policy, and improved results on the inflation front. Since the 1980s, the inflation rate has decreased and stabilized in the range of 2 to 3 per cent while becoming less volatile. The most plausible explanation for this change is what scholars refer to as "central bank learning" i.e. improvements in the Fed's ability to define achievable objectives, and in its execution of policy options, resulting in a decrease in both the inflation rate and its volatility since the 1960s and 1970s.

Since 2000, the inflation rate has averaged 2.44 per cent per year, well below the current assumed rate of 3 per cent. My view, shared by many in the profession, is that this outcome is the result of improved policy-making at the Fed, reflected also at other central banks worldwide, and that it is unlikely that the same mistakes made in the 1960s and 1970s will be repeated over the long term. As a result, I expect the current regime of low and steady inflation to continue in the future. Both market and survey based measures of expected inflation are consistent with this view. For these reasons, I believe that a reduction in the assumed rate of inflation from 3 per cent to 2.75 per cent is well founded.

Inflationary Episodes in U.S. History

Period 1:	1914-1947	Volatile Inflation & Deflation
Period 2:	1948-1965	Low Inflation & Low Volatility
Period 3:	1966-1982	Upward Breakout of Inflation & Volcker Recession
Period 4:	1983-2010	Period of Moderating Inflation

Table 1: Average Inflation Rates Across U.S. Inflation Episodes

Inflation Rates & Variability Across U.S. Episodes		
Period	Avg Inflation Rate	Std Deviation
1914-1947	2.79	7.53
1948-1965	1.74	1.98
1966-1981	7.06	3.42
1982-1989	3.73	1.11
1990-1999	2.93	1.24
2000-present	2.44	1.13

Figure 1: U.S. Inflation Over the very Long Run

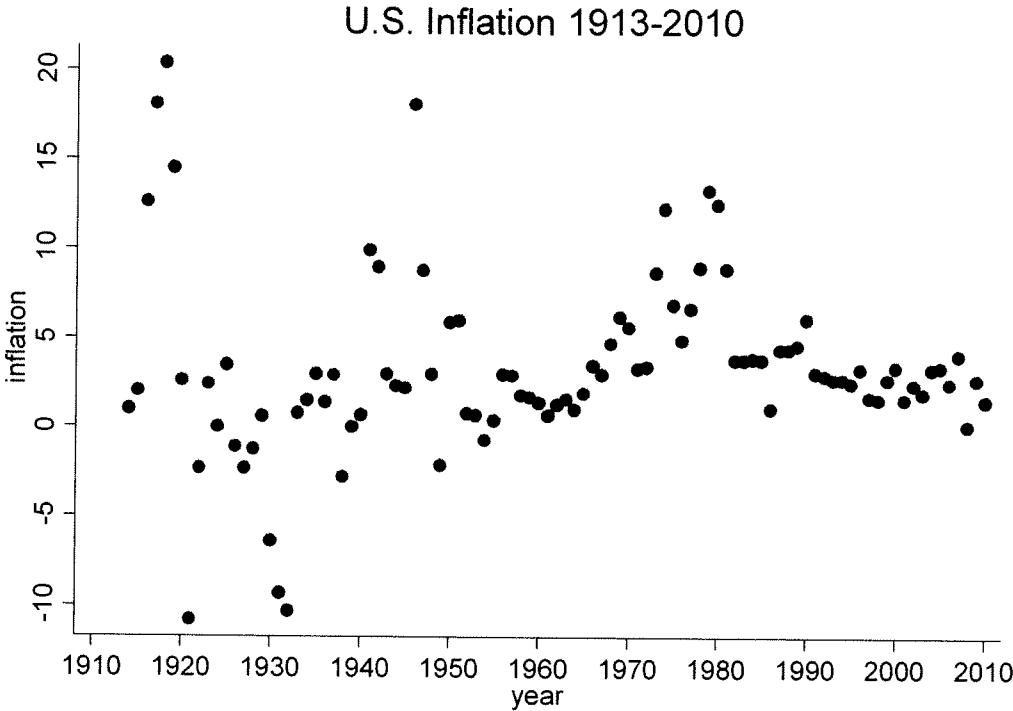


Figure 2: Post-War Inflation

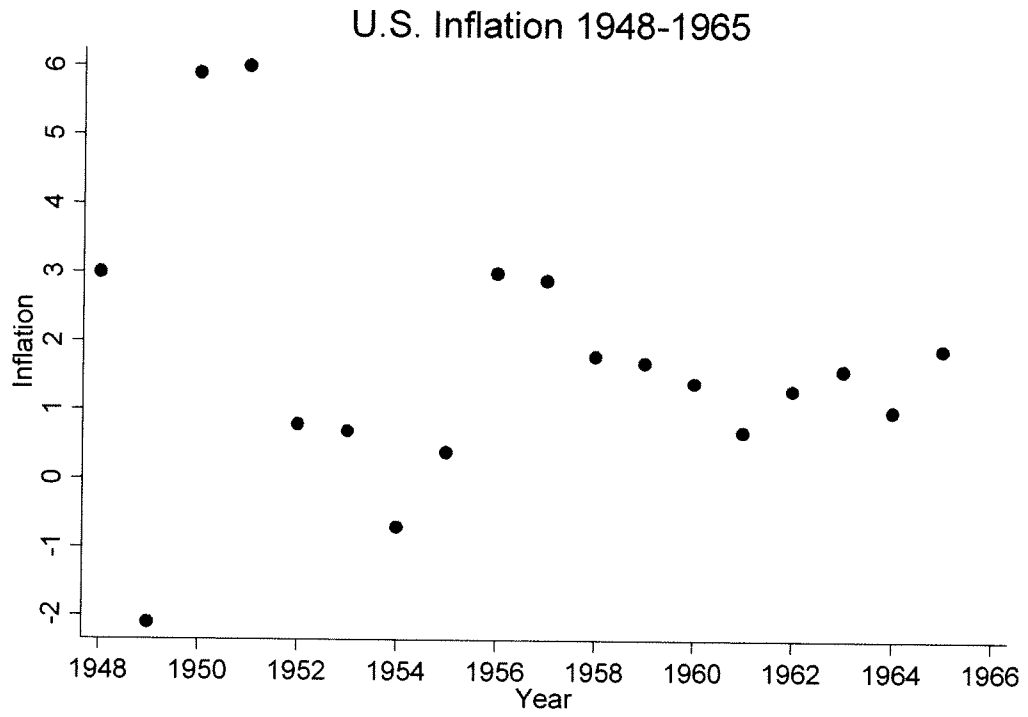


Figure 3: The Inflationary Period, 1966-1981

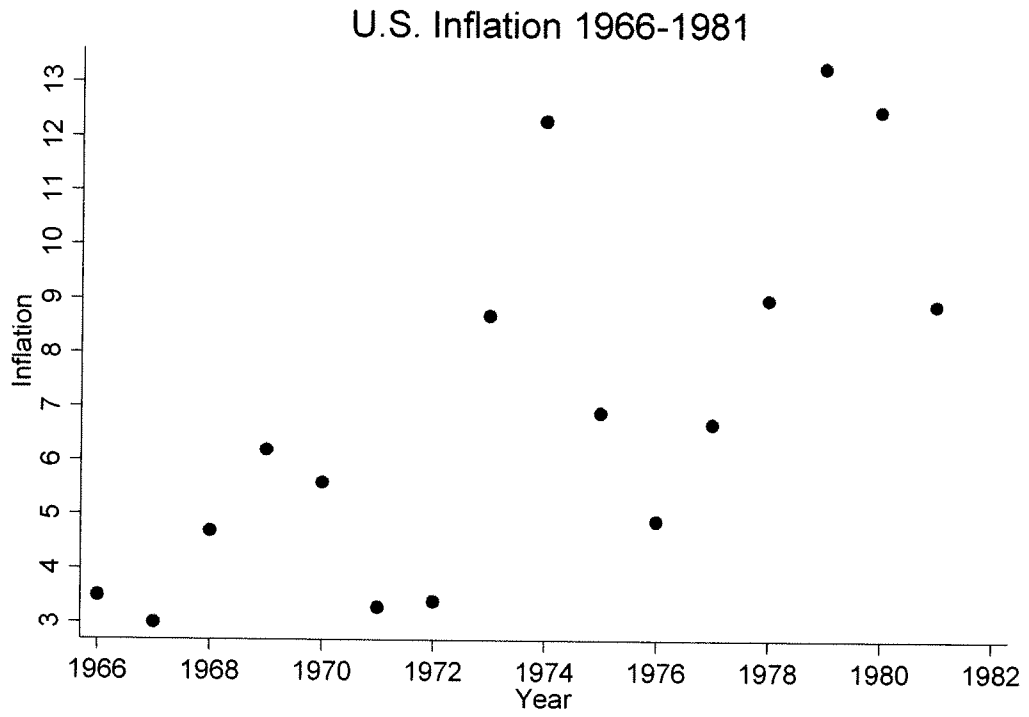


Figure 4: U.S. Inflation Since 1982

