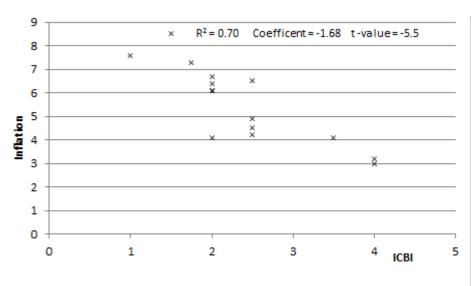
## Section 10.5 Cross Country Evidence on the Monetarist Paradox

The monetarist paradox implies that central banks that follow tight money policies will end up with low interest rates, and vice versa. This section provides robust cross country evidence on the monetarist paradox. To begin with, I have reproduced in a Table the data indicating a robust <u>inverse</u> relationship between the inflation rate and the <u>Index of Central Bank Independence (henceforth, ICBI)</u> from the oft cited paper "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence" by Alesina and Summers (Journal of Money, Credit and Banking, May 1993). Their corresponding Chart has been reproduced umpteen times in many articles, and in well known text books. The R square and t-value indicate the robust linkage.

## Inverse Link between ICBI and Inflation

Country	ICBI	Inflation(1955-88)	Policy Rate* (1964-88)
US	3.5	4.1	6.95
Canada	2.5	4.5	8.65
Japan	2.5	4.9	5.47
Belgium	2	4.1	7.87
Denmark	2.5	6.5	8.16
France	2	6.1	8.24
Germany	4	3	4.5
Italy	1.75	7.3	9.86
Holland	2.5	4.2	6
Norway	2	6.1	7.09
Sweden	2	6.1	7.36
Switzerland	4	3.2	3.38
Spain	1.5	8.5	n.a.
N. Zealand	1	7.6	n.a.
Australia	2	6.4	n.a.
U.K.	2	6.7	n.a

<sup>\*</sup>Average Policy Rate for 12 out of 16 countries above computed by this author, from IFS data.



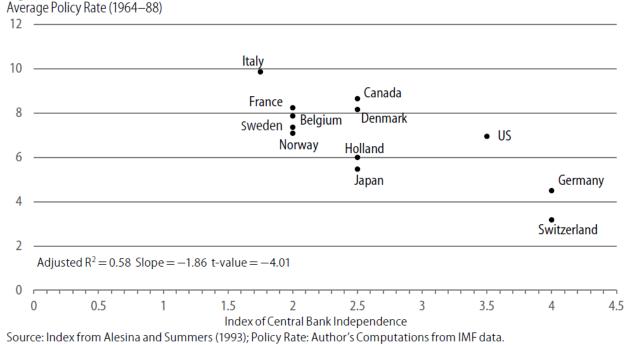
The ICBI of Alesina and Summers above was constructed by averaging the Parkin-Bade (1982) index based mostly on criterion of political independence with another index used by Grilli, Masciandaro, and Tabellini (Political amd Monetary Institutions and Public inancial Policies in the Industrial Countries, Economic Policy, Oct. 1991, pp. 341-392), based on both measures of political and economic independence. The Grilli, Masciandaro, and Tabellini (GMT), similar to the Parkin and Bade index, measures (i) Whether the governor and the board are appointed by the government (ii) the length of their term (iii) whether government approval is required for the monetary policy decisions and (iv) whether the price stability objective is explicitly and prominently part of the central bank's statue, as in Germany. However, more crucially, GMT introduce the economic independence criterion which is defined as "the ability to use instruments of monetary policy without restriction". The most common such restriction is forcing the central bank to print money to finance the government deficit. The GMT index is heavily weighted with the economic independence criteria.

Examing links between a wide range of institutional data, debt-GDP ratios andinflation rates, GMT concluded, Hence low inflation as well as a more disclipned fiscal policy are likely to be observed in countries with an independent central bank..(pg 365) ...Third, if central bank independence is on average associated with lower inflation, there is no systematic on real output growth, nor on its variability. Thus having an independent central bank is almost like having a free lunch (pg. 375). Grili. Masciandaro and Tabellini, 1991

Alesina and Summers presented data on the level and variance of the following variables: inflation, real GNP, per cpita real GNP, unemployment rate, and real interest rates and examined and plotted various links among them. Their most notable finding is the inverse link between ICBI and average inflation.

However, Alesina and Summers did not extend their analysis to examine the possible links of the policy rate or other nominal interest rates to ICBI. Nor has it been done elsewhere, to the best of my knowledge. The biggest benefit of tight money to borowers, firms and the Treasury or Finance Ministry that pays interest on debt stems from its long run impact on nominal rates. Unlike real rates, which are subject to conceptual ambiguities and measurement problems, nominal rates are unique, observable values. Purely logically, combining the Fisher equation with the ICBI-inflation inverse link, generates the negative 'monetarist paradox' correlation between tight money and the policy rate in the long run, as in Chapter 9 and reproduced in Section 10.1. Based on a consistent policy rate data series, available for 12 out of the 16 countries in the A-S sample, the scatter plot is shown below. It can be seen that the monetarist paradox is statistically very robust.





Due to some data limitations, the following four countries in the ICBI Index [Australia 2.0, New Zeland 1.0, Spain 1.5 and U.K 2.0 ]above have been omitted here. <sup>11</sup>

## 10.6 Changing Independence of the Reserve Bank of India

A critical dimension of central bank independence is the extent to which the central bank is free of the compulsion to finance or monetize the government debt by printing money. In this regard, the RBI which started functioning in 1935 had economic independence until the early 1950s. The Finance member, Sir George Schuster, (in his speech to the legislative Assembly in September 1933) introducing the Bill to set up the RBI stated,

"It has generally been agreed in all the constitutional discussions, and the experience of all other countries bears this out, that when the direction of public finance is in the hands of a ministry responsible to a popularly elected Legislater, a ministry which would for that reason be liable to frequent change with the changing political situation, it is desirable that the control of currency and credit in the country should be in the hand of independent authority which can act with continuity ... Futher, the experience of all countries is again united in leading to the conclusion that the best and indeed the only practical device for securing this independence and continuity is to set up a central bank, independent of political influence" (emphasis added)

The RBI then lost much of its independence in early 1955 due to what then seemed to be a minor technical agreement opposed by then RBI Governor H.V.R. Iyengar, requiring the RBI to provide the Finance Ministry temporary funding whenever needed by issuing what was called *ad hoc* Treasury Bills. However, this agreement led to substantial automatic monetisation of the deficit. In 1956, with the push to massive expenditure on heavy industry in the Second Five Year Plan, there was a huge, continuing rise in deficits financed by these *ad hoc* Treasury Bills, resulting in both inflation and India's license Raj (MIFA, Ch 18 ECHO).

<sup>&</sup>lt;sup>11</sup> This scatter-plot is from the book review of Subbarao (Moorthy, 2016) and based on my class notes from 2006.