THE FRAUD OF MACROECONOMIC STABILIZATION POLICY

by

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The details of the future will remain forever veiled to us. But give a gypsy seer a Ph.D. in economics and arm her with statistics and mathematical models, and people suddenly start taking her seriously. She will be invited to testify before Congress and held up by State TV as an expert in business forecasting. But from an analytical point of view, what she does is no different from what she did as Sister Sarah at a roadside stand.

Llewellyn Rockwell, Jr.
"Defeat of the Experts,"
The Free Market, March 2000, p. 4

In the middle to late years of the twentieth century, it became commonplace in expositions of mainstream economics to claim that labor market adjustments are grossly inadequate as a corrective mechanism for business cycle downturns. Probably the most cited empirical evidence in support of this proposition was, and still is, the economic events of the 1930s. On the theoretical side, the reference ***du jour*** was, of course, John Maynard Keynes's ***The General Theory of Employment, Interest and Money*** (1936). In ***The General Theory***, Keynes set the spiritual tone for at least the next half-century with his remark, "It can only be a foolish person who would prefer a flexible wage policy to a flexible money policy." (1936, p. 268) This was to translate into the notion that "money wage rates don't matter,"

Competing Paradigms: Keynes vs. The Classicals vs. the Austrians

Much of Keynes's theoretical apparatus hinges on the notion of money-wage rigidity. He was so convinced of the validity of this notion that he advocated using the money wage rate as the ***numeraire*** in constructing a system of national income accounts. A "pure" Keynesian framework begins as follows:

$$(1) L = f(AD)$$

where L denotes employment and AD indicates aggregate demand.

By definition, AD can be denoted by PQ, with P being the general price level and Q representing real output of goods and services. Now, invoking Keynes's suggestion that the money wage (W) should be the unit of account,

$$(2) AD = PQ/W.$$

If we employ a linear form of (1), so that L = b AD, combining (1) and (2) yields

$$(3) L = b (PQ/W).$$

The interesting thing about expression (3) is that it contains the real wage rate for labor. It can be rearranged to give

$$(4) W/P = b (Q/L),$$

indicating that the real wage rate will be proportional to the average product of labor (Q/L). In the introductory chapters of ***The General Theory***, Keynes recognizes the importance of the real wage rate, admitting that "the classicals" (Keynes's terminology) had it right in claiming that employment is negatively related to the real wage rate, given the technological conditions of production. Consistent with Keynes's remarks on this issue, a straightforward statement of a classical view of the economy produces a relationship that is the logical equivalent of (4).

Assume a simple Cobb-Douglas type aggregate production function:

$$(5) Q = aK^{a} L^{(1-a)}$$

where K and L denote capital and labor inputs, respectively.

Converting to money levels of output gives

$$(6) PQ = P aK^{a} L^{(1-a)} .$$

Differentiating (6) with respect to L to give the marginal product of labor produces

$$(7) d PQ/d L = P(1 - a)(Q/L).$$

The classical assumption is that money wage rates will be equal to the money version of the marginal product of labor (the value of the marginal product under competitive conditions). This gives

$$(8) W = P(1 - a)(Q/L), \text{ or}$$

$$(9) W/P = (1 - a)(Q/L).$$

Since both b and (1 - a) are parametric values, expressions (4) and (9) are generic equivalents. This being the case, what are the differences, if any, between the Keynesian and classical paradigms? The answer to that question is rather straightforward. In what we have called the classical version of things, there is some fundamental underlying equilibrium position towards which the system tends to move. This can be seen by rearranging (9) as follows:

$$(10) w_r/(Q/L) = (1 - a),$$

where w_r denotes the real wage rate for labor (= W/P). Expression (10) suggests that real wage rates and the average product of labor tend to move in concert through time, maintaining the same proportional relationship. The term on the left hand side of (1) can be thought of as the productivity adjusted real wage for labor in the economy (hereafter indicated as ARW). In the classical world, it is presumed that market adjustments of money wages and prices will tend to move it towards a unique equilibrium value that is associated with full employment of labor resources.

On the other hand, within the pure Keynesian framework, money wage rates are assumed to be rigid, which, holding the average productivity of labor constant, leaves only the price level as a variable that may adjust or be adjusted to alter levels of employment. Further, there is no implication of the existence of a unique equilibrium position toward which the economy moves. Rather, it is argued that there are multiple potential equilibrium positions, depending on the levels of the rigid money wage rate and the exogenously determined price level. This gives rise to the notion that a "less than full employment equilibrium" is a possibility. We would add that there is a variant of Keynes's thinking in which he argues that even if money wages were not rigid, movements of money wage rates would produce proportional changes in prices, leaving the real wage rate unchanged. This produces the same result as the rigid money wage rate assumption. Where does the Austrian perception of the macroeconomy fit in this paradigmatic description? We begin by noting that there are similarities between the classical perception of the macroeconomy and the Austrian view. Both are rooted in the marginalist tradition and both entertain the possible existence of a unique equilibrium position given appropriate ***ceteris paribus*** conditions. However, they differ significantly on one critical point, the nature of the adjustment towards that underlying equilibrium. The classical view is susceptible to being interpreted as arguing for instantaneous adjustment to equilibrium. (Boettke, 1997) In fact, it is often characterized in this fashion, perhaps unfairly. Such a depiction leads to the rather obvious point that business cycle fluctuations, especially one of the magnitude of the Great Depression of the 1930s, are evidence of the shortcomings of the classical model and, by implication, market adjustment mechanisms in general.

By contrast, the Austrian perspective places greater emphasis on the elements of market process, exploring the ways in which discoordination of markets occur and how markets respond to that discoordination. In general, Austrians are more interested in expression (10) when it reads

$$(11) w_r = (1 - a).$$

In many ways, this permits a richer exegesis of historical phenomena. For example, in our book, ***Out of Work***, we have been able to confirm the relationship between employment/unemployment and the productivity adjusted real wage (ARW) and identify the origins of macroeconomic discoordination in the United States throughout the twentieth century by focusing on the sources of movement in the ARW measure. Our basic conclusion in that work is that discoordination between prices, productivity of labor, and money wage rates explains the pattern of business cycle fluctuations in the United States. The story we tell there is one of continual discoordination-produced disequilibrium, albeit with a tendency to seek the underlying equilibrium position.

An Aside on Modernity

Before moving on to a more in depth treatment of macroeconomic discoordination, let us pause for a moment to consider the place of this discussion in the context of today's intellectual milieu. It might be argued that what we have said has a distinctly "old hat," even "archaic," flavor. Where is the discussion of rational expectations? The New Classical Economics? Real Business Cycle Theory? We consider these to be mere variations on one or the other of the broad paradigms we have sketched. Take the rational expectations (RATEX) argument as an example. In a world characterized by RATEX behavior, **on average**, the time path of macroeconomic outcomes, such as income and employment, would be identical with that generated by an instantaneous market-clearing classical model, except for random forecast errors. In each successive period, the random forecasting error would be recognized, taken into account, and, thus, not transmitted through to the next period's forecast. The end result is nothing more than a classical instantaneous adjustment model with a random error term. This has given rise to the term "New Classical Economics." On the other side of the coin is the so-called New-Keynesian view, which emphasizes rigidities in prices, both of inputs and outputs. And, beyond that, there are other "modern" macroeconomic interpretations that simply focus on a particular element of the ARW measure that may produce discoordination between money wages, prices and labor productivity. For example, real business cycle theories emphasize productivity shocks to the system as a source of discoordination. In summary, the various modern variations of macroeconomic models all are spiritually akin to one of the broader paradigms already discussed.

The Sources of Discoordination

What are the sources of variations in macroeconomic phenomena, in particular, the productivity-adjusted-real-wage rate (ARW)? We suggest three potential candidates. First, there is the possibility that there is an endogenous adjustment mechanism, such as that implied by the classical model and denied by Keynes, that operates to recoordinate a system that is in a disequilibrium position. But, beyond that, there might be exogenous shocks to a macrosystem, shocks that may be either systematic or random in nature. By systematic shocks, we mean changes over time that exhibit some regular pattern and, consequently, are susceptible to being anticipated or forecast. Random shocks, obviously, are just that, movements that cannot be anticipated or forecast which constitute what is often denoted as "white noise."

With those thoughts in mind, we have attempted to identify the nature of changes in the ARW variable using quarterly data (1959.1 through 1996.2) for the United States. We begin by defining a simple endogenous recoordinating mechanism for the macroeconomy:

$$(12) \quad \% \ ARW_t = f(ARW_{t-1} - \overline{ARW}),$$

which is to argue that this period's percentage change in ARW is systematically related to last period's deviation from the "normal." or "natural," or "equilibrium" value for ARW, denoted by $\overline{ARW}$.

Before proceeding with this line of reasoning, a few comments about the validity of presuming some underlying normal value for ARW are in order. In the data set under consideration, the initial value of ARW is 99.92 (1992=100) and the terminal value is 100.63. In between, the maximum value is 104.14 (in 1980.2) and the minimum is 96.24 (in 1965.4). This indicates a time series that is essentially trendless with a variation of approximately four percent, plus or minus, about its mean value (= 99.72). This is quite consistent with the notion of an underlying normal or equilibrium value.[1] Given the already noted statistical relationship between variations in the ARW term and employment, unemployment, and, we would add, rates of growth in national output, the variations of the ARW statistic are quite meaningful. (Vedder and

[1] A unit root test of this data series reveals that it is a stationary series.

Gallaway, 1997: Appendix B) Higher levels of ARW are associated with higher unemployment and lower rates of economic growth.

To return to the matter of a recoordinating mechanism in the American economy, a linear regression equation embodying the relationship described in (12) yields

$$(13)\ \% \ \ ARW_t = -0.007 \ \ -0.135(\overline{ARW_{t-1} -} \ ARW), R^2 = .067, \text{ D-W} = 1.79,$$
$$(0.11)(3.24)$$

where the values in parentheses beneath the regression coefficients are t-statistics. Clearly, there is a statistically significant endogenous adjustment mechanism. However, it accounts for only a small proportion of the variation in percentage changes in the ARW measure and the value of the regression parameter that describes it seems, at first glance to be small. More will be said about this later.

Assuming that the mechanism described by (13) represents the sole source of endogenous variation in movements in ARW, we can use that information to estimate the magnitude of exogenous changes. Specifically, we may define

$$(14)(\% \ \ ARW)_a = (\% \ \ ARW)_n \ + \ (\% \ \ ARW)_x,$$

where the subscripts a, n, and x denote actual, endogenous, and exogenous, respectively. Since the constant term in (13) is not significantly different from zero, (14) can be restated as

$$(15)(\% \ \ ARW)_a = -0.135(ARW_{t-1} \ -ARW) + \ \overline{(\% \ \ ARW})_x.$$

Solving for $(\% \ \ ARW)_x$ gives

$$(16)(\%\ \ ARW)_x=(\%\ \ ARW)_a\ +\ 0.135(ARW_{t-1}\ -\overline{ARW}).$$

A graphic representation of this data series is shown in Figure 1. The visual pattern is suggestive of a "white noise" series with a zero mean. This is confirmed by a correllogram analysis. The details, for lags one through 20, are reported in Table 1. Using the calculated values of the exogenous component of changes in the adjusted real wage, we are able to generate a simulated adjusted real wage series that describes what the behavior of the adjusted real wage would be in the absence of the endogenous recoordinating mechanism shown in expression (13). This is compared to the actual behavior of the adjusted real wage in Figure 2. The difference between the variation in the two series is apparent.

Measured more precisely, the variance of the simulated series is 3.48 while that of the actual data is 2.01. Thus, the apparently weak recoordinating mechanism identified in expression (13) reduces the variance in the adjusted real wage rate by 42 percent. It also reduces the mean value of the adjusted real wage by 0.96, which translates into a reduction in the typical unemployment rate of 0.73 percentage points.[2]

The Significance of Discoordination Patterns

The nature of the sources of discoordination just described is

[2] This is based on the regression parameters reported in Vedder and Gallaway (1997: Appendix B).

remarkably consistent with the Austrian macroeconomic paradigm. Apparently, economic phenomena are quite dynamic, consisting of non-serially correlated events that perturb the economy continually. As a result, there is constant discoordination among wages, prices, and the average product of labor. The macroeconomy is in a continual state of flux. Nevertheless, there remains an underlying tendency toward stability over time. There are two sources of this stability. One, of course, is the modest, but important, recoordinating mechanism we have described. The second is less evident, but certainly significant. It takes the form of a phenomenon articulated by Eugen Slutsky in the 1920s. In a paper published in Moscow (1927) he demonstrated that random perturbations in a basic data series are capable of generating cycles in the data.[3] Thus, while over time the cumulative effect of a series of random shocks may cause a data series to move in a particular direction, the very randomness of additional shocks will cause the series to reverse its direction of movement. What the Slutsky phenomenon implies is that cycles will emerge spontaneously in a world of random change.[4] This is what happens in the specific case of the adjusted real wage. The amplitude of these cycles is then

[3] Slutsky's paper was republished in ***Econometrica*** in 1937.

[4] In Milton and Rose D. Friedman, ***Two Lucky People***, Milton Friedman comments about his "skepticism about whether there is indeed an economic phenomenon justifying the designation `cycle,' or whether the economic fluctuations glorified by that title are not merely reactions to a series of random shocks, along the lines of a famous 1927 article by Eugen Slutsky." (p. 50)

dampened, but not totally eliminated, by a recoordinating mechanism.

The Impact on Contra-Cyclical Macroeconomic Policy

The foregoing analysis has profound implications with respect to the idea that it is possible to execute a deliberate and successful short-run contra-cyclical macroeconomic policy. This notion became something of a staple item in economic thinking in the post-World War II era. A classic statement of this idea was provided by John Kenneth Galbraith in 1982 testimony before the Joint Economic Committee of Congress, where he said:

> Persistent in the belief of the present administration is the notion that economic recovery and improving unemployment are an autonomous tendency of the system ... there is ... no such autonomous tendency. Recovery is not the work of kindly gods with a special commitment to the free enterprise system: it is, alas, the affirmative accomplishment of man - and woman. (Galbraith, 1982)

Galbraith's view of the world is embodied formally in American society in the Employment Act of 1946 and its 1978 amendments (also known as the Humphrey-Hawkins Act). Laws of this sort proceed from certain fundamental premises. First, and perhaps most important is the belief that the macroeconomy can be modeled in a precise and reasonably exact fashion. Supposedly, such modeling permits the identification of potential sources of discoordination before they occur. Once these have been determined, the next step is obvious. Simply formulate policies that will introduce factors that will compensate for any discoordinating elements in the economy. Ergo, presto - what we have is fine tuning, the belief that the economy can be constrained in the short-run by wise and judicious policy to follow some pre-ordained growth path.

Unfortunately, the initial premise - that discoordination can be anticipated - is flawed. Future discoordination primarily is the product of nature's willfulness, the series of non-serially correlated changes in a key macroeconomic variable, the productivity-adjusted-real wage rate. Thus, any attempt at anticipating the presence or lack of discoordination amounts to nothing more that trying to out-guess nature. This offers an explanation for the failure of precisely modeled versions of the macroeconomy to provide guidance with respect to economic events. By now, the tales of such failures are the stuff of legend, so much so that the term macroeconomic forecasting has acquired an oxymoronic patina.

Even so, it might be argued that it is possible to respond effectively, ***ex post***, to incidents of discoordination. Once discoordination is identified, might it not be possible for conscious, deliberate, economic policy measures to supplement the endogenous recoordinating mechanism in a way that enhances economic stability? For example, assume the following:

(1)It is possible to precisely measure the degree of discoordination, and

(2)Economic policy makers are able, at will, to introduce the precise amount of recoordination necessary to offset the observed discoordination.

These are heroic assumptions, involving the best possible set of circumstances for conducting short-term macroeconomic stabilization policy. What would happen in such a world? We have explored that issue through a series of simulations that involve introducing exact offsets to discoordinating changes with variable lag times. More precisely, we have calculated a simulated value for the quarter-to-quarter percentage rate of change in the adjusted real wage using the following expression:

$$(17)([\% \quad ARW]_{sim})_t = \% \quad ARW_t - \% \quad ARW_{t-n}$$

where the subscripts sim, t, n represent, respectively, a simulated value, time, and the length of the lag in the implementation of stabilization policy.[5] Simulations of this sort have been conducted for lags of up to twenty quarters using both the actual values of the percentage changes in the ARW measure and the estimated values for the initial exogenous changes in the ARW as measures of the first term on the right hand side of (17). The data embrace the period 1959.1 through 1996.2.

To evaluate the outcomes of the simulated policy actions, we have calculated the variance and the range of the percentage changes in the resultant adjusted real wage and compared them with the

[5] The time lag encompasses several dimensions of a lag in the implementation of a policy change, including the time required to recognize the problem, the time required to execute the policy, and the time required for the policy to have its effect.

same values for the initial values of the changes in the ARW. Presumably, a successful macropolicy intervention would produce a decline in both the variance and the range of the percentage changes in the productivity adjusted real wage rate. The results of these simulations are shown in Tables 2 and 3. They are astounding. What they indicate is that the implementation of macro-stabilization policy ***under the best of conditions*** is ***destabilizing***, not stabilizing. In all cases, the variance of the simulated data series, as well as its range, exceed that of the actual data. The specifics are as follows: (1) On average, the variances of the policy impacted data series are ***twice*** that of the base data series, and (2) The ranges of the policy impacted data series are, on average, about fifty percent greater than the ranges in the base data series. This argues that even ***ex post*** attempts to engage in macroeconomic stabilization policy are not only ineffective, but counter-productive.

This does not mean that economists have nothing to offer in the way of advice. However, their role should be conditioned by the sentiments espoused by Frederic Bastiat and not those of John Maynard Keynes. It was Keynes who glibly pontificated, "In the long run, we are all dead." But it was Bastiat, some 150 years ago, who commented:

> There is only one difference between a bad economist and a good one: The bad economist confines himself to the ***visible*** effect; the good economist takes into account both the effect that can be seen and those effects that must be ***foreseen***.

Yet, this difference is tremendous; for it almost always happens that when the immediate consequence is favorable, the later consequences are disastrous, and vice versa. Whence it follows that the bad economist pursues a small present gain that will be followed by a great evil to come, while the good economist pursues a great good to come, at the cost of a small present evil.

Summary and Concluding Remarks

What is the overall significance of this discussion? Basically, our arguments can be summarized in the following propositions:

(1)All major macroeconomic paradigms have as their centerpiece the productivity-adjusted real wage rate.

(2)The productivity-adjusted real wage rate has the property of being a trendless stationary time series.

(3)Variations in the productivity-adjusted real wage are of two broad types:

a.Exogenous shocks.

b.An endogenous recoordinating mechanism.

(4)The exogenous shocks are random in character and generate cycles in the productivity-adjusted real wage rate (and unemployment and economic growth) in the fashion suggested by Slutsky (1927 and 1937).

(5)The endogenous recoordinating mechanism dampens the amplitude of these cycles, reducing the variance in the productivity-adjusted real wage rate in the United States by 42 percent over the period 1959.1 through 1996.2

(6)Consequently, short-term economic forecasting is a rather dubious proposition.

(7)***Ex post*** attempts at implementing stabilization policy are ***destabilizing***, not stabilizing.

(8)Therefore, the notion of short-run contra-cyclical macroeconomic policy making is an exercise in futility.

To place these technical conclusions in perspective, we point out that the overall interpretation of short-run economic phenomena presented here is quite consistent with the Austrian conception of a world that is seeking to attain an underlying equilibrium state but is being buffeted continually by exogenous shocks of an unpredictable nature. As a consequence, entrepreneurs and workers continuously must adjust their behavior to take into account these changing circumstances. The best they can hope for from government policy makers is, in the spirit of Hippocrates advising future doctors, that they do no harm. Given that the phenomena that policy makers confront in the short-run are essentially unpredictable and given that even their best efforts are the equivalent of medieval doctors ***bleeding*** their patients, the most appropriate short-run macroeconomic stabilization policy is to give the aforementioned entrepreneurs and workers maximum freedom to adjust to potentially discoordinating shocks to the macroeconomy. Clearly, the conventional wisdom proposition suggested by Galbraith that there is endemic instability in a market based economy that can be remedied only by government policy interventions is inappropriate. Nevertheless, in an almost classic display of what Hayek calls "the fatal conceit," contemporary mainstream economists continue to believe in the efficacy of such policy. Just this past Fenruary 1, Harvard economist Gregory Mankiw is quoted as follows in ***The Wall Street Journal***: "When you look at the mistakes of the 1920s and 1930s, they were clearly amateurish. It's hard to imagine that happening again - we understand the business cycle better." Will some economists never learn? They seem doomed to perpetually underestimate the ability of government policy makers to muck things up.

TABLE 1

Correllogram, Simulated Exogenous Percentage Changes in Productivity-Adjusted
Real Wage Rate, United States, 1959.2-1996.1

Lag	Autocorrelation	Partial Autocorrelation
-1	0.082	0.082
-2	-0.074	-0.081
-3	0.098	0.113
-4	-0.003	-0.029
-5	-0.126	-0.108
-6	-0.097	-0.091
-7	0.038	0.041
-8	-0.022	-0.020
-9	0.026	0.054
-10	0.016	-0.019
-11	0.073	0.067
-12	-0.097	-0.127
-13	0.034	0.077
-14	-0.053	-0.104

-15	-0.054	0.012
-16	0.002	-0.017
-17	-0.104	-0.099
-18	0.030	0.037
-19	-0.044	-0.067
-20	-0.036	-0.033

Additional Statistics: Box-Pierce Q-Stat= 12.77, Prob.= 0.8869 and Ljung-Box Q-Stat= 13.76, Prob. = 0.8426. SE of Correlations = 0.082.

TABLE 2

Comparison of Policy Impacted Productivity-Adjusted Real Wage Rate Series with Base Data Series, Various Policy Implementation Lags, United States, 1959.1-1996.2

Series and Lag	Based on Exogenous Changes				Based on Actual Change			
	Minimum	Maximum	Range	Variance	Minimum	Maximum	Range	Variance
PCCSIM	-1.99	1.53	3.52	0.4830	-	-	-	-
PCCARW	-	-	-	-	-2.27	1.79	4.06	0.5552
-1	-2.68	2.91	5.59	0.8891	-2.97	3.00	5.97	1.0599
-2	-2.63	2.38	5.01	1.0282	-3.30	2.74	6.04	1.2629
-3	-2.52	2.72	5.24	0.8655	-2.69	2.94	5.63	0.9992
-4	-2.77	2.47	5.24	0.9679	-3.13	2.76	5.89	1.1473
-5	-3.29	2.49	5.78	1.0916	-3.95	2.98	6.93	1.2960
-6	-3.51	2.27	5.78	1.0685	-3.92	2.85	6.77	1.2294
-7	-2.78	2.15	4.93	0.9357	-2.78	2.26	5.04	1.0864
-8	-2.31	2.75	5.06	1.0016	-2.54	3.53	6.07	1.1720
-9	-2.63	3.03	5.66	0.8947	-2.93	3.28	6.21	1.0845
-10	-2.87	3.08	5.95	0.9467	-3.07	3.51	6.58	1.0539
-11	-2.09	2.58	4.64	0.9547	-2.74	2.71	5.45	1.0556
-12	-2.71	2.83	5.54	1.0816	-3.26	2.87	6.13	1.2544
-13	-2.14	2.61	4.75	0.9491	-2.60	2.90	5.50	1/0694
-14	-2.67	2.94	5.61	1.0023	-3.08	3.34	6.42	1.1761
-15	-2.23	2.77	5.00	1.0025	-2.76	3.21	5.97	1.1550

-16	-2.89	2.56	5.45	0.9702	-3.42	2.90	6.32	1.0870
-17	-3.11	2.12	5.23	1.0860	-3.38	2.72	6.10	1.2553
-18	-2.25	2.31	4.56	0.9475	-2.29	2.58	4.87	1.0851
-19	-2.54	3.15	5.69	1.0361	-2.56	4.07	6.63	1.1460
-20	-2.45	2.62	5.07	1.0351	-2.39	3.25	5.64	1.1638
Average	-2.65	2.64	5.29	0.9880	-2.99	3.02	6.01	1.1420

TABLE 3

Summary Statistics, Comparison of Policy Impacted Productivity-Adjusted real Wage Rate Series with Base Data Series, Various Policy Implementation Lages, United States, 1959.1-1996.2

Base Data Series	Ratio of Variance of Policy Impacted Series to Variance of Base Data Series	Ratio of Range of Policy Impacted Series to Range of Base Date Series
Exogenous Percentage Changes in Productivity-Adjusted Real Wage Rate	2.05	1.50
Actual Percentage Changes in Productivity-Adjusted Real Wage Rate	2.05	1.48

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