

## Not All NGDP Is Created Equal: A Critique of Market Monetarism

Alexander William Salter

George Mason University

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### Abstract

Market Monetarism, with its policy rule of NGDP targeting, has in common with free banking that both seek to avoid monetary disequilibrium. One might conclude that these are different approaches to achieving the same end. The purpose of this paper is to show that the proximate ends are in fact conceived differently: Stable NGDP as an object of choice by a central bank is different from NGDP as the emergent outcome of the market process. Furthermore, well-known insights on knowledge, the pricing process, and the institutional context of economic activity suggest that this difference has important implications.

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### I. Introduction

This article makes a simple but important point: NGDP as the emergent outcome of the market process is not the same thing as NGDP as an object of choice by a central bank. The rise of the Market Monetarist School and their policy recommendation that the central bank target the level of nominal GDP draws support from, amongst other sources, the literature on monetary equilibrium theory. NGDP targeting thus has been likened to fractional-reserve free banking in that it is a means for achieving monetary equilibrium and, as a consequence, stable nominal spending.<sup>1</sup> But the process by which NGDP is created and sustained matters: NGDP as an

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<sup>1</sup> For example, Sumner (2012a, p. 21) cites a blog post by Christensen wherein the latter lists as one of the benefits of NGDP targeting that it emulates free banking. Elsewhere Sumner (2011, p. 95) seems to suggest that NGDP targeting is one of a substitutable number of proposals to current monetary policy problems; however, being the most politically feasible, it is the most desirable. See also Hendrickson (2012) on NGDP targeting as a “technology,” so to speak, for maintaining monetary equilibrium.

emergent outcome is a different phenomenon than NGDP as an object of choice by an extramarket organization. Furthermore, due to familiar arguments concerning knowledge, the pricing process, and the institutional framework for economic activity, this difference has implications for the inferences we can make concerning the causal relationship between stable nominal income and economic prosperity.

I develop the argument as follows: In Section II I briefly summarize NGDP targeting, the Market Monetarist School, and its similarities to free banking and monetary disequilibrium. In Section III I show how the divergent views on how to achieve stable NGDP have serious implications for the process by which NGDP is created. In Section IV I trace out the consequences of these views. In Section V I offer concluding remarks.

## **II. Market Monetarism and NGDP Level Targeting<sup>2</sup>**

The Market Monetarist School is known chiefly for its recommendation that central banks adopt a policy of targeting the level of nominal income (NGDP).<sup>3</sup> The economic operation of an NGDP target is straightforward: The central bank offsets a fall in the

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<sup>2</sup> The following arguments are not meant to apply to any theorist in particular. Accordingly, “Market Monetarist” should be interpreted to mean, “Any theorist whose first-best monetary institution involves a central bank with an NGDP target.” “Free banking monetary disequilibrium theorist” should be interpreted to mean the same, with free banking replacing the central bank. The reader should not infer that a Market Monetarist cannot also be a monetary disequilibrium theorist, or that all monetary disequilibrium theorists endorse free banking. See Yeager (1997), himself not an advocate of free banking, for the quintessential treatment of monetary disequilibrium theory.

<sup>3</sup> Lars Christensen (2011, p. 1) aptly sums up the movement:

“Market Monetarism is the first economic school to be born out of the blogosphere. Market Monetarism shares many of the views of traditional Monetarism but unlike traditional Monetarism Market Monetarism is skeptical about the usefulness of monetary aggregates as policy instruments and as an indicator for the monetary policy stance. Instead, Market Monetarists recommend using market pricing to evaluate the stance of monetary policy and as a policy instrument. Contrary to traditional Monetarists—who recommend a rule for money supply growth—Market Monetarists recommend targeting the Nominal GDP (NGDP) level. The view of the leading Market Monetarists is that the Great Recession was not caused by a banking crisis but rather by excessively tight monetary policy. This is the so-called Monetary Disorder view of the Great Recession.”

velocity of money by increasing the money supply, and vice versa. Using the familiar equation of exchange,  $MV = Py$ , we can see that offsetting changes in velocity with opposite one-for-one changes in the money supply (constant  $MV$ ) results in a constant level of nominal income ( $Py$ ). The result is an explicit policy of nominal aggregate demand stabilization.<sup>4</sup> Proponents of NGDP targeting note that, in the presence of aggregate demand shocks, NGDP targeting has the same stabilizing properties as a price level target, which historically has been more popular among academic macroeconomists. However, NGDP targeting outperforms price level targeting in the presence of aggregate supply shocks. This is because price level targeting requires the central bank to offset the impact of a negative (positive) aggregate supply shock on the price level by contracting (expanding) aggregate demand, which necessarily compounds the impact of the original aggregate supply shock on real income.<sup>5</sup> Market Monetarists, as advocates of neutralizing monetary policy as far as possible, recommend an NGDP level target out of a desire to minimize these effects.

Market Monetarists and scholars working within the monetary disequilibrium framework find themselves in agreement on the theoretical desirability of an NGDP target. White (1989, 1995), Selgin (1988, 1994), and Selgin and White (1994) note that a free banking system has the unintended consequence of stabilizing nominal income in the face of ordinary shocks to the velocity of bank-issued money.<sup>6</sup> This is because profit-maximizing banks have a financial incentive to issue more (fewer) liabilities when the public demonstrates increased (decreased) demand to hold those liabilities. However, Market Monetarists and free banking monetary disequilibrium theorists sometimes differ with regard to their preferred implementation strategy. The free banking monetary disequilibrium theorists prefer solutions that will result in the

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<sup>4</sup> Most Market Monetarists favor targeting the level of NGDP consistent with NGDP growing by a constant percentage per time period. Conditional upon correctly being anticipated by market actors, the effects are the same as the static nominal income level target. One of the functions Market Monetarists expect a central bank to perform is anchoring market actors' expectations such that they are consistent with the dynamic form of the equation of exchange,  $gM + gV = gP + gy$ , where  $g$  denotes growth rates.

<sup>5</sup> See Sumner (2011, 2012b) for a more detailed theoretical exposition.

<sup>6</sup> Sechrest (2008) provides a formal model.

abolishment of the Federal Reserve and the deregulation of banking. On the other side, at least for the time being, some Market Monetarists wish to keep the Federal Reserve, using it as a mechanism for implementing an explicit nominal income target. For example, leading Market Monetarist School writer Scott Sumner favors a system wherein the Federal Reserve chooses the NGDP growth trajectory and then sets up a futures market for trading NGDP contracts. The Fed uses the market price of these futures contracts to infer market expectations about the level of nominal income going forward. The Fed's job is ultimately to adjust the supply of base money via traditional open market operations until market expectations of the level of nominal income (which is intended to increase by the constant growth target every time period) matches the Fed's stated target.<sup>7</sup>

It is not my intention here to conduct a detailed analysis of any plan for utilizing the central bank in implementing an NGDP level targeting regime. Instead, I will take the claims of both the monetary equilibrium theorists—that fractional-reserve free banking will result in a stable level of nominal income as the unintended result of profit-seeking bankers—and Market Monetarists—that the central bank is capable of implementing a nominal income level target using some combination of open market operations and futures contract targeting—as given and focus on the informational consequences of achieving a stabilization of nominal income as the emergent result of the market process versus as an object of control for an extramarket organization.<sup>8</sup>

### **III. Two Conceptions of NGDP**

The crucial distinction in the two approaches outlined above lies in the differing conceptions of NGDP. The monetary disequilibrium theorists regard NGDP as an emergent phenomenon of the competitive market process as described by Mises (1949), Hayek (1948), and Kirzner (1973). It is not something that exists as an object of choice for any individual or group of individuals. Rather, it

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<sup>7</sup> Sumner (2009) provides an informal defense of this plan. See Sumner (1989, 1995) for academic work related to futures price targeting. In Sumner's ideal world, however, the money supply process is automated such that the Fed is no longer needed for that purpose.

<sup>8</sup> Ikeda (1997, 2003) considers such a focus characteristic of the Austrian approach to political economy.

is the unintended consequence of the decentralized actions of private bankers who, in attempting to maximize profits, offset changes in inside-money velocity with corresponding and opposite changes in the circulation of their privately issued money.<sup>9</sup> The end result is a state of affairs in which nominal income is stabilized, meaning that the impacts of changes in the supply and demand of bank-issued money are minimized, approximating the ideal of monetary neutrality.

In contrast, the view held by (some) Market Monetarists treats NGDP as an object of choice—or rather, as something that ought to be treated as an object of choice, and one that ought to be acted upon to prevent the economy from deviating from its trend growth path. The view is inherently mechanistic: The economy proceeds smoothly along its growth path until it is disturbed by some sort of shock, in which case the monetary authority takes action to stabilize aggregate demand, meaning to stabilize NGDP. The motivation, as before, is an attempt to approximate monetary neutrality as closely as possible.<sup>10</sup>

What follows from these views on the relationship between stable NGDP and economic prosperity? First, consider the case of emergence. All economic activity—exchange behavior—takes place within a given framework of rules (Buchanan, 1964; Brennan and Buchanan, 2000; see also North, 1990); the interpersonal conduct arising out of these rules shapes the flow of information throughout society, which in turn influences the organizations and orders in that society (Hayek, 1948). Respect for private property, contracts, and the rule of law are the necessary “constitutional” foundations for the

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<sup>9</sup> See Horwitz (1992, 2000) for theoretical explications.

<sup>10</sup> Wagner (2012) provides a useful framework for contrasting these two distinct ways of theorizing about the relationship between micro and macro entities. In the first, macro observations (such as NGDP) are of the same order of complexity as micro observations (such as the agents whose actions generate NGDP); the difference between them is merely one of scale, not of kind: “Macro is micro addressed in a loud voice” (Wagner, 2012, p. 433). In the second, macro observations are not reducible to micro observations and exist at a separate level of analysis: “Macro phenomena emerge out of or supervene on interactions among micro units within the ecology of plans that constitute an economy” (Wagner, 2012, p. 434). The first account, which Wagner associates with representative-agent macro models, is largely consistent with the Market Monetarist view; the second account, which emphasizes a plurality of agent types, fits the free banking monetary disequilibrium view.

kind of fractional-reserve free banking regime of Selgin (1989) and White (1995), one of the emergent properties of which is stabilization of NGDP (Horwitz, 2011). The important point here is the constitutional framework of society that results in an environment wherein individuals, acting on the basis of their localized knowledge, pursue their self-perceived interest by behaving in a manner that results in money approaching neutrality at the macro level. In this scenario, stable nominal spending is not the *cause* of economic prosperity; it is the *consequence* of the same institutions that produce prosperity.

For Market Monetarists, stable NGDP promotes prosperity, *ceteris paribus*.<sup>11</sup> Figure 1, which shows the now-famous collapse in NGDP beginning in 2008, is frequently cited by Market Monetarists as evidence for their claims. Steadily-growing NGDP is requisite for prosperity. On the eve of the recession following the financial crisis, NGDP collapsed, and this collapse was the proximate cause of the recession. The Federal Reserve ought to have prevented this by

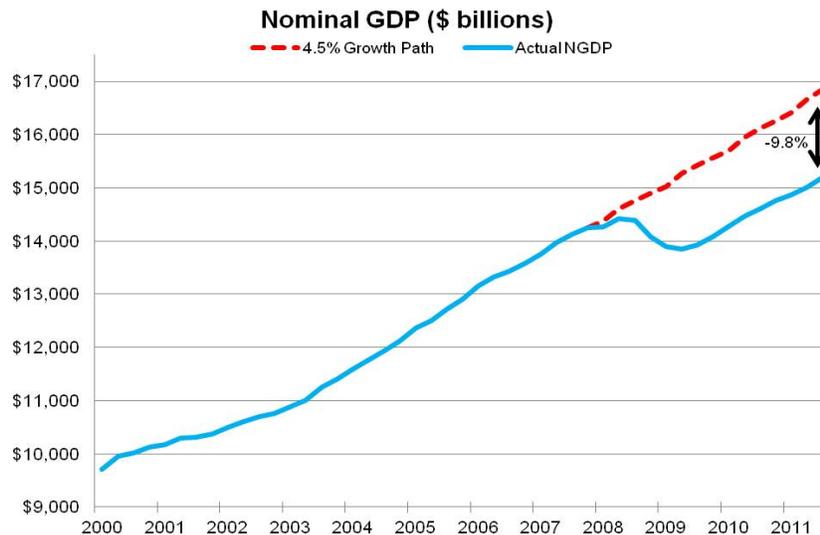


Figure 1. NGDP and the Great Recession. Source: Oregon Office of Economic Analysis, [http://oregoneconomicanalysis.files.wordpress.com/2011/10/ngdp\\_trend1.jpg](http://oregoneconomicanalysis.files.wordpress.com/2011/10/ngdp_trend1.jpg).

<sup>11</sup> Market Monetarists acknowledge the importance of confounding factors, such as supply-side phenomena.

acting on NGDP via the monetary base. By preventing NGDP from collapsing, and thereby accommodating an increased demand to hold money (thus approximating monetary neutrality), the Fed would have prevented the Great Recession, leaving us with a nontrivial, but much milder, market correction.<sup>12</sup>

#### **IV. Consequences**

The consequence of this divergent approach to NGDP is that NGDP becomes a different phenomenon. Patterns of economic activity can differ between the two systems even should they equally well stabilize NGDP. When NGDP is the emergent outcome of the market process, the injection/absorption points of money are the individual banks of issue. Changes in the supply of money are constrained by banks' balance sheets and mediated by their profit-seeking behavior. On a daily basis, banks will destroy and issue notes and checking deposits based on circumstances unique to their own business. The process is the same in the event of an economy-wide change in the demand to hold money; all that differs is that banks are now acting in relative concert. On the other side, when NGDP is treated as an object of choice by a central bank (no matter how "market-oriented" its implementation scheme), it changes the quantity of base money via one organization's interaction with a few key large financial organizations. Even if we assume away the structural problems associated with the "top-heaviness" of this system (Selgin, 2012), we are still left with the reality of a unitary point for the injection of funds, which are then channeled through a relatively small number of receivers of the new money. This implies that changes, as a result of money injections, in relative prices, and thus changes in resource allocation and the structure of production, will differ across the two approaches. Given Hayek's (1948) work on knowledge and the pricing process, we must conclude that the patterns of knowledge transmission and dissemination will also be different.

The argument above is implied in the more general claim concerning the consequences of treating emergent phenomena as choice variables. Divorcing such a phenomenon from the process by which it emerges is an abstraction that is not innocuous. Making it a central agency's choice variable changes its significance for market

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<sup>12</sup> Again, see Sumner (2011, 2012) for more in-depth treatments.

actors. As Buchanan (1982) famously noted, the market order is defined in the process of its emergence. We can envision a world where all the familiar macroeconomic aggregates—consumption, net exports, the price level, etc.—exist as the consequence of the exchange behavior of the many, many individuals inhabiting our hypothetical society; figures on these aggregates are not kept even by any social scientist or statistical bureau. The coercive organizations of governance—whatever form they take—limit themselves to protection of private property, contract enforcement, and dispute resolution. One day a clever statistician decides to “measure” the total volume of economic output, expressed in the society’s *numeraire*. The statistician keeps track of this data series over time, and eventually notices an interesting regularity: when this figure increases, there is an increased abundance of goods and services available to society. When it decreases, the reverse happens. In his excitement, the scientist concludes that increasing the total volume of economic output is the cause of general economic prosperity. He reasons further that, in addition to the functions listed above, society’s governance organizations should take a more active role in promoting a greater total volume of economic output. Ideally, this would include keeping detailed statistics on the various components of total economic output so that active attempts to boost this figure can be taken whenever possible, especially when market activity slows down.

The reader surely sees where this analogy is headed. Once the society’s governance institutions begin treating the total volume of economic outcome as a choice variable—once it is divorced from the competitive market process by which it is generated—the ability of a social scientist to make the usual claims concerning the pricing process and resources flowing to their highest-valued use is weakened.<sup>13</sup> The error of our eager statistician was the same as discussed earlier in this paper: misunderstanding the nature of causality between the phenomenon in question and general economic prosperity. In reality, no statistic is “doing the work” of creating prosperity; as always, it is the institutions in which economic activity takes place that ensure prosperity, with the associated consequence of the given statistic delivering reliable information concerning

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<sup>13</sup> This claim holds without characterizing the outcome as binary, i.e., “Unless it unambiguously satisfies consumer preferences, we must be completely ignorant.”

prosperity (Boettke, 2012, Ch. 1; see also Boettke and Subrick 2002).<sup>14</sup>

## **V. Concluding Remarks**

To be clear, this paper has not shown that a central bank with an explicit nominal income target is less desirable than the status quo. It is entirely possible that NGDP targeting should be preferred to an inflation target and to the vague “dual mandate” of the Federal Reserve. Defense of this argument would necessitate engaging the economic literature on rules versus discretion and would also require detailed robustness analysis of the kind proposed by Leeson and Subrick (2006) and rigorously developed by Pennington (2011). This means considering not just informational concerns but also incentive concerns, as in the public choice literature.<sup>15</sup>

This paper argued that NGDP as an emergent result of the market process is not the same thing as NGDP that is an object of choice for a central bank. In other words, fractional-reserve free banking and NGDP targeting by the central bank are not two different “technologies” for achieving the same theoretical end. This point must be fully appreciated by all parties who are interested in conducting comparative institutional analysis of monetary regimes. The classic insights on knowledge, the pricing process, and the institutional framework for economic activity show that process matters; this is no less true for NGDP.

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<sup>14</sup> Market Monetarists will no doubt argue that the above example is not comparable with their own position because they recommend not an attempt by an extramarket organization to allocate real resources but for that organization to provide the means (money balances) for market agents to undertake this process themselves. Fair enough. However, Market Monetarists cannot avoid the fact that the organization they wish to use to implement their plan is a “Big Player”—an organization external to the market process, unconstrained by the rules that apply to organizations operating within the market process (Butos and Koppl, 1993; Koppl, 2002)—and thus the arguments made above, derived from recognizing the importance of institutional context, knowledge, and the pricing process, still apply. The method by which NGDP is generated and changes over time is a “difference that makes a difference.”

<sup>15</sup> Boettke and Smith (2012a, 2012b, 2012c) are leading the charge in applying robust political economy to monetary institutions.

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