Reply to Referee Report on Discussion Paper Nr. 2009-50 "Stabilizing an Unstable Economy: On the Choice of Proper Policy Measures" $\frac{1}{2}$

submitted to the special issue "Managing Financial Instability in Capitalist Economies" to be published in Economics, $The\ Open-Access$, $Open-Assessment\ E-journal$

In the first place we would like to thank the referees for the various constructive and quite valuable comments and suggestions on the paper, which have been of great help for the conception of this new version.

Now we would like to address the issues raised by both referees.

Referee 1:

- 1. We also think that the existence of fundamentalists and chartists in the financial markets, as well as their interplay and switching, is an important factor determining financial and macroeconomic stability. As mentioned by Referee 1, in the present model their relative weight α is assumed to be constant. We did not endogenize α simply because we wanted to focus on other mechanism. A large body of literature, see e.g. De Grauwe and Grimaldi (2006), has already investigated this issue. Furthermore, in Proaño (2010), this issue is investigated in a model along the lines of the disequilibrium approach pursued in this paper.
- 2. This is also an important possible extension of the model of the present paper, which we however did not pursue in the present paper because we wanted first to focus on a closed economy.
- 3. We have clarified the mechanisms at work in the new version of the paper.
- 4. We have shortened the paper.

Referee 2:

Conceptual issues:

1.a It is very difficult to implement the issue of different frequencies (of financial and real variables) in a macroeconomic framework. In fact, despite the empirical relevance of this issue, it is by and large not implemented at all in actual macroeconomic models, neither in the DSGE approach nor in more traditional, Keynesian models. We thus leave this (important) issue for further research.

- 1.b As the literature on "financialization" points out, the US development (primarily) over the last decade pointed out by Referee 2 can be explained by the practice of equity buybacks which had the purpose of decreasing its overall cost of capital. Since this development, however, represents more a (perhaps short-lived) particularity than a long-term macroeconomic trend, and because it lies beyond the focus of our paper, we do not consider that it diminishes the relevance of our model.
- 2. In the new version of the paper we explain our motivation to focus primarily on the interaction between the stock market and the real economy and not on the (more established) real interest channel.
- 3. We have deleted the numerical simulations since they were in fact rather sketchy in the last version and also because they were only meant to deliver a motivation for the following stability analysis. However, we would like to point out that the "instability" scenarios might not only take place under "unrealistic" parameter choices, but may result in fact from the dynamic interaction between the different macroeconomic mechanisms at work under "realistic" parameter constellations, if not tamed by sufficiently aggressive monetary and fiscal policies, as well as by (empirically based) nonlinearities such as the "kink" in the Phillips Curve. In previous studies we have addressed such stability/instability issues on the basis of empirical parameter estimates of many of the behavioral equations discussed in this paper, see e.g. Chen and Flaschel (2006), Flaschel and Krolzig (2006) and Proaño (2009). In general terms, the purpose of such numerical simulations is not to show that the economy always features chaotic dynamics (because it normally does not), but rather to illustrate potentially destabilizing forces which may become relevant if certain parameters ceteris paribus cross certain "thresholds". We think that such an approach to macroeconomic modeling – which acknowledges the possibility of unstable dynamics at the macroeconomic level – is more appropriate than the nowadays popular DSGE framework, where the economy is intrinsically stable due to the assumption of rational expectations and the role of monetary policy is reduced by and large to the establishment of determinacy.
- 4. The related work mentioned in the footnote only highlights the importance of stock-flow consistency analysis. We only wanted to make the reader aware of the fact that our model is stock-flow consistent. We deleted the footnote in order to avoid misunderstandings.

Problems for clarification:

- 1. We have improved the explanation of this point in the paper.
- 2. In contrast to eq.(72), eq.(73) describes the revisions of capital gains expectations by the chartists. Under the implementation of a Tobin tax for all traders, the chartists realize that the equity price changes that matter for their gains expectations are by diminished by τ_e , being thus not \hat{p}_e , but $(1 \tau_e)\hat{p}_e$. Fundamentalists, in contrast, have a longer-term orientation and thus care less for short-term variations in the equity prices and the gains resulting from them. Concerning the third remark, it is in the logic of such a tax system that it should be in principle applied in a symmetric way. The final implementation of such a system in reality, and thus the compromise with the status quo, is however a matter of political debate.
- 3. The referee made us here aware of an important point that we haven't been aware yet. However, after detailed reflection it turned clear to us that since the stock of financial assets held by the central bank are not relevant for the portfolio choice process of the private asset holders but only changes over time, the ratios β_h and ϵ_h do not matter for q and thus for the investment decisions of the private sector.¹
- 4. We have followed the suggestion of the referee both in the introduction and the conclusions of the paper.

¹To answer the referee's question, the ratios β_h and ϵ_h are dynamically endogenous and change only over time.

References

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