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Tentative Title: Understanding Non Inflationary Demand Driven Business Cycles

This paper will start by pointing out a quantitative puzzle regarding the nature of US business cycles over the last 30 years. As is well known, over this period the economy experienced 3 main cycles. In each case, the common narrative behind these cycles has been that they were in large part driven by demand (ex: residential investment demand in the 2000s, tech. Investment demand in the 1990, and commercial investment demand in the 1980s). This view is supported by the fact that both TFP and measured investment specific technological progress were either counter-cyclical or at most a-cyclical over the period, making a pure supply-side Real Business Cycle explanation untenable. While the real economy experienced these cycles, inflation was very stable over the entire period and exhibited only a very small co-variance with output. Such demand driven cycles are not in themselves puzzling, but the associated inflation patterns are puzzling if one adopts a New-Keynesien perspective for interpreting the period. In particular, using a standard calibration of a New-Keynesien Phillips curve we will show that actual inflation exhibited a level of volatility about 9 times smaller than that predicted by the model, with in addition the auto-correlation of inflation being too small in data relative to the model. In other words, over this period, we appear to have experience demand driven business cycles with essentially no inflation response. While it may be possible to explain the facts by relying on very infrequent changes in prices (much larger than that supported by microeconomic studies), we believe that other more substantive changes to the New-Keynesien paradigm are needed to explain such periods of non-inflationary demand driven business cycles, and that is the goal of the paper.

The main claim of the paper is that non-inflationary demand driven business cycles are easiest to explain if one moves away from the representative agent framework on which the New-Keynesien model --and the RBC model -- is based. There are two dimensions on which we believe one needs to move away from the representative agent framework. On the one hand, it is important to recognize that in the short run agents are not perfectly mobile between different sectors of the economy. In particular, an agent that is producing consumption goods may not be able to switch without cost to producing investment goods. On the other hand, it is also the case that financial markets are incomplete such that agents cannot perfectly insure themselves against shocks that may affect the sector n which there are specialized. We will show that these two features are sufficient to offer a simple theory of non-inflationary demand driven business cycles. To show this, we will proceed by a set of proposition which link properties of the households with properties of the aggregate economy. In this way, we will be able

to show the extent to which the departures from the representative agent we advocate are close to necessary and sufficient to explain the features we have identified. Moreover, we will provide evidence from the PSID which support the "imperfections" we argue are central to a better understanding of business cycles. The end product of the paper is a non-representative agent New-Keynesien type macro-model where certain types of demand induced fluctuations are associated with perfectly stable inflation.