Professor Pasinetti, the Trend & the Cycle

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In 1962, Luigi Pasinetti published a model of the "Cambridge theory of income distribution" that corrected a "logical slip" in Nicholas Kaldor's earlier formulation of the problem. Pasinetti's model included two stocks of capital (capitalist-owned and worker-owned) instead of one, avoided Kaldor's assumption that the workers' marginal propensity to save was zero, and demonstrated that on a balanced growth path the rate of profit depends *only* on the growth rate of the labor force and the capitalists' marginal propensity to save (the "Pasinetti theorem").

Earlier, in 1960, Pasinetti examined the multiplier-accelerator family of models and concluded that they were unable to endogenously explain the interaction of the trend and the cycle due to their aggregate character. More specifically, the macro-nature of the variables in these models implicitly assumes that there is an economy-wide demand for a composite basket of goods that is expanding in a proportional way over time. Pasinetti argued that such an assumption would be true only in a theoretical economy in which economic growth was solely attributable to population growth, with constant returns to scale, no changes in preferences, and no technological progress. In such economies, entrepreneurs would be able to quickly learn the fixed preferences of the population (and thus the fixed behavioral parameters of the system), produce to meet these preferences, and steer the economy to a steady state path of equilibrium growth.

Pasinetti went on to argue that a more realistic model would allow for preference changes as per capita income grows [from (say) subsistence goods to (say) durable goods to (say) luxury goods]. In such a system, entrepreneurs would make mistakes in their expectations about the future composition of consumption, invest the wrong amount, and thus generate an interacting trend and cycle. In a model of such a system, these mistakes imply that the behavioral parameters of (especially) the investment function change over time.

The purpose of this paper is to extend Pasinetti's 1962 model by adding a behavioral entrepreneurial expectations formulation to its structure. The extended model generates an interacting trend and cycle and closely mimics U.S. macroeconomic data. **F**ull **I**nformation **M**aximum **L**ikelihood estimation with **O**ptimal **F**iltering (FIMLOF) is used to estimate the model's behavioral parameters (including the parameters of the investment function), some of which evolve over time. These results add value to the debate about the causes of the interaction between the trend and the cycle and serve to blend ideas from Professor Pasinetti's two papers.