## One-Pager - Mainstream Economics for the General Reader by Anne Emerson

During my recent talk on Creativity, I discovered that artists and writers do not know how heavily mainstream economics depends on a scientific concept known as "equilibrium." This essay is an attempt to close the gap in that regard. Most of our policy-makers reference a model of the Macroeconomy (the whole country) that depends heavily on aiming for "equilibrium." They might prefer one style (free-market) or another (government manipulation) but their main goal is "full-employment equilibrium."

Please keep in mind that "social science," of which Economics is a subset, is an application of the scientific method to human behavior. In the scientific method, we make observations, and develop a theory or framework of laws to explain what we observe. You might think of it this way. We watch marbles rolling down a slope. If they are all the same size and weight, they will probably all roll approximately the same way. So we develop some math to explain how one marble rolls. The same math will apply to all the others. Then, if we have a green marble in hand, we do not have to roll it down the slope in order to know how it will roll. (Yes, our brains can do this without conscious use of math; but stay with me here!)

When our scientific "system" gets more complicated – say, the marbles are different sizes, and after the first slope, they go down a steeper slope, or a slope with fuzzy stuff on it – we can still develop some math to explain how the marbles will behave. Soon we may need a computer, and a mathematical "model," rather than relying on our brains. Then, we may also want to work out what happens when the marbles interact with one another.

Maybe you are wondering what kind of idiot spends time doing that much sophisticated math, when most of us just get on with life. Well, whole cities can be put together with the math of urban planning, in such a way that the actions of the moving parts can be coordinated. For example, we can synchronize traffic lights all over a city, and control flows of traffic with speed limits that respond to changes in the volume of vehicles on different roads. Video games are programmed, using sophisticated math, tool So, there is *indeed* a role for people who like to do advanced math, in the real world.

So, back to modern-day mainstream economics. I will tell you a secret – it is built around the abovementioned scientific concept of "equilibrium." Supply and demand, businesses, government, etc. all interact *within* a mathematical structure or system of equations called "General Equilibrium Theory." Policymakers reference other equilibrium-based mathematical models. One such is, "Keynes' General Theory of [Unemployment Equilibrium]." We want to avoid unemployment equilibrium at all costs, because it was believed to operate during the Great Depression.

Since we don't want another "Unemployment Equilibrium," we must work hard to develop a "Full-Employment Equilibrium." Policy-makers reference and apply the mathematical theory, full of complex equations, that explains how to reach a full-employment equilibrium. You may have seen their efforts described for the public in the media as "taming inflation, with a soft landing."

Equilibrium is the tendency of a system of moving parts to come to rest in a steady state. (Think, perhaps of a pendulum clock which will stop ticking if it is not wound, because the pendulum stops swinging unless someone adds outside energy to it, by winding the mechanism.)

I will tell you another secret – mainstream economists cannot solve their equations without equilibrium. Ask a scientist or mathematician about "too many variables and too many unknowns." So, the system "in balance" or "at rest" can be solved by setting a number of variables equal to one another, that are not equal to one another outside the equilibrium state. That means that mainstream policy-makers are all chasing the elusive equilibrium with math that assumes equilibrium. Policymakers on both left and right, that is.

Sorry, my one page is up. See page two for more.