

Module 3

Lecture 19

Topic

3.4 Alfred Marshall I

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- Alfred Marshall (1842-1924), along with Leon Walras, were the pioneers of Neo-classical theory.
- Marshall was a student of mathematics. He started studying economics around 1860.
- Malthus predicted that with a rise in population real wage would fall. But the example of England proved it wrong -- real wage was rising with expanding population.
- J.S. Mill expressed his dissatisfaction with wage fund theory and in 1869 he rejected it.
- Around the same time Marx strongly criticized classical economics and proposed his radical analysis of society.
- In 1871 Jevons and Menger attacked the supply based classical theory to propose their demand based theory based on marginalist principles
- Jevons made the strong claim that he had destroyed the classical theory of value. Keynes, referring to Jevon's claim mentioned that: "Jevons saw the Kettle boil and cried out with delighted voice of a child; Marshall too had seen the kettle boil and shut down silently to build an engine".
- Marshall's methodology was a combined reflection of his mathematical training and his background in history.
- Marshall begun to develop his mathematical structure for understanding economics by 1870 but did not publish till 1890

- In Marshall's hand the scope of economics changed considerably. He dropped the then fashionable term "political economy" in favor of the term "economics" { his book was named "Principles of Economics".
- There can be two reasons behind the shift. One possibility is that he wanted to differentiate the scope of his work from that of Marx who at that time was proposing the theories of social change. Another possibility is that he wanted to create a separate field of economics in universities.
- The difference between the positive and normative economics started taking shape in Marshall's hand. The way he defined economics however is rather loose:

"Political Economy or economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of material requisites of well being."

- How can this definition differentiate economics from biological science, sociology, psychology, anthropology and history?
- Marshall was aware that this definition was too broad. But he consciously chose a wide definition leaving the choice of a narrow definition to individual economists.
- Marshall was primarily interested in the ways to eradicate poverty and for that he reasoned that it is important to understand the relation between the wants of the society and its economic activity.
- The classical political economy looked at the supply side (economic activity) while Jevons and Menger only looked at the demand side (wants). Marshall dismissed both the views as partial and contended that a general analysis of the society should include both. One factor complements the other.
- He maintained that they are interdependent but activity is a primary factor. This shows his affinity to the classical school.
- Marshall brings on some major changes in the methodologies of economics.

- He was trained in mathematical formulations and abstract modeling of Ricardo which strongly influenced his methodology.
- His abstract and mathematical methodologies were strongly attacked by contemporary British and German economists who were historically oriented. Later he was also attacked by the institutionalist economist Veblen.
- However, he was also sarcastic about too much abstraction posed by mathematical modeling.

I have not been able to lay my hands on any notes as to Mathematic-economics that would be of any use to you and I have very indistinct memories of what I used to think on the subject. I never read mathematics now: in fact I have forgotten how to integrate a good many things.

But I know I had a growing feeling in the later years of my work at the subject that a good mathematical theorem dealing with economic hypotheses was very unlikely to be good economics: and I went more and more on the rules { (1) Use mathematics as a shorthand language, rather than as an engine of inquiry. (2) Keep to them until you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life. (5) Burn the mathematics. (6) If you can't succeed in (4), burn (3). This last I did often.

- Marshall realized that analyzing the economy, especially establishing causal relationship faces with two critical problems.
 1. Everything seems to be depending upon everything else.
 2. Time changes continuously and with that many other variables change simultaneously.
- Marshall solved the problem by introducing partial analysis. He introduced the concept of *ceteris paribus* which means that one factor is changed keeping others constant in a theoretical experiment. Related to this is the idea of partial equilibrium approach. In this approach we focus on one market. Suppose we want to know that happens to the rice market if a new technology arrives. The technology shifts the supply curve and price changes. However, in a real economy the process should not stop there as the changes in the rice market should trigger changes in other markets that should again have a second degree impact on rice market. This is called the general equilibrium approach which makes economic analysis much more complex. The partial equilibrium approach will only focus on what happens to the market in discussion (rice in this case). In this case the analysis will only be restricted to understanding how rice price and

rice production change when a new technology is introduced assuming all other markets unperturbed.

- To solve the problem of continuous change of time he conceptualized four periods of time. One is very short run when supply is fixed so any change in demand will lead to change in prices only. The next one is short run when supply can be changed but there are other factors such as firm size, capital goods etc. Then comes long run when most of the fixed factors can change keeping a very few factors such as technology as the fixed factor. Then in the very long run all factors even technology can change.