

Chapter Twelve: The Marginalist School – Forerunners (pg 211 - 230)

Historic Background

By the 1850's, it was clear that there were problems with the classical view
Also clear that there were “economic” problems in society

Uneven distribution of wealth

Even if the general standard of living was rising

Business fluctuations were now clearly a real phenomena

The (relative) decline of agrarian economies meant

Many now exposed to fluctuations

Appalling working conditions in industry

Three responses to the above problems

Socialism and socialist thought (Marxism)

Trade Unionism

Demand for government reform of the market

All three of these went against Classical thought

Who opposed all those views, even though they knew that

There value and distribution theories were inaccurate

“our policy prescriptions are correct, even if our theory isn't”

But classical economics had been turned, the labor theory of value

Meant rent is theft, all labor is productive, only labor has value

This was never what Smith or others said, or believed

Major Tenants of the Marginalist School

- Focus on the margin: the margin is where decisions are made, that is where the focus should be
- Rational Economic Behavior. Assumed purposeful, planned behavior (rejected “moronic materialism” of marx), that was aimed at achieving some objective. The objective was to maximize utility (Benthamite at the individual level), individual utility, not “social” utility
- Microeconomic emphasis: the individual and the firm take center stage, rather than just looking at the aggregates. This both simplified economics (partial equilibrium analyses) and enriched it – since now you could study details in, well, detail)
- Abstract Deduction: they continued to use abstract deduction (similar to Ricardo), they rejected the historical method
- Emphasized pure Competition: they assumed many buyers and sellers, rationality, etc., which led to competitive markets
- Demand oriented price theory: They rejected the classical assumption that supply theory (costs of production) determined “exchange value”, instead they emphasized (over-emphasized) demand as the determinant of price
- Subjective Utility: Demand depends on Utility, which is subjective and depends on individual tastes and values
- Equilibrium approach: The market tends towards equilibrium, when disturbed it tends to move back to its set state

- Merger of Land and Capital Goods: they stopped treating them as separate, and later incorporated interest into one toolset: the rate of return for an asset. Cleared up a lot of confusion

Stylistic note: The early marginalists began to use math and graphs....

Whom did the Early Marginalists seek to benefit?

They thought everybody, since they were advancing understanding of economics

They opposed the Marxists, and showed how competition raised wages

They also opposed unions though, and tended to favor status quo, landowners

How was the Marginalist School valid or Useful, or correct at the time?

Geometric representations and mathematical techniques

One more time, Geometrical Representations and mathematical techniques

Demand was finally emphasized as it should have been

Assumptions were now explicitly stated, not left lurking in the background

A real Distinction between objective, verifiable principles (facts)

And value judgments or inferred results

Real progress came about through partial equilibrium analysis

Set up a “model”

State all the assumptions, and variables, that are important

Now, vary things one variable at a time.....

This tremendously simplified the task of analyzing society

And the addition of successive variables led to better realism over time

Example: the return on human and physical capital.....

Top down classicalists vs. bottom up marginalists

Or, the concerns of large industries vs. the grocer

The business cycle vs. local completion – “durable goods”

What parts became Lasting Contributions?

(skip for now).....

Antoine Augustine Cournot

1801-1877, French

Brilliant mathematician, also contributed to philosophy and economics

Really the first economist to read like a modern economist

Not influential till after his death, Jevon, Marshal and Fischer all in his debt

Modeled Monopoly, Duopoly and pure competition....

And did so mathematically

Analyzed the rate of change of total cost and revenue functions

And did so using first derivatives – marginal revenue and cost

Cournot’s theory of Monopoly (read page 216 and 218)

(Insert Graph ch12a here) pg 217 in book....

His demand curve

His Marginal Revenue curve

He understood that where $MR = MC$, that was profit maximizing

Extended it out for cases where MC was above 0, or was rising

Cournot's Theory of Duopoly

He also analyzed monopolistic competition, the duopoly

(Insert graph ch12b here) (pg 219 in book)

Cournot's theory of the Monopoly is pretty much what we teach today, except for its lack of price discrimination

Cournot's theory of duopoly is more problematic, it is not incorrect, but it is incomplete – the range of reactions that are available to duopolists are much broader (price leaders, collusion, first-second player, etc.)

Jules Dupuit

French, 1804-1866, engineer with a side interest in economics

Marginal utility and demand

Argued that a demand curve was just a marginal utility curve

Introduced the concept of a demand curve

An inverse relationship between price and quantity demanded...

Note: for all that we have been talking about demand, he was the first to put it in a curve. This allowed the distinction between “demand curve”, and “quantity demanded”

Marginal Utility and demand

Value of a goods varies from consumer to consumer

And it varies depending on the amount the consumer is getting

From this, he created the “curve of consumption”

Since water has diminishing marginal utility, as we consume more

The last unit consumed provides less utility

And we can/will rank order each unit based on our subjective valuation of what it can do for us (its marginal utility)

Dupuit drew from this a curve of consumption....

Which was a demand curve, downward sloping, etc....

(see walrus's critiques later)

Consumer Surplus.....

Dupuit realized that while the marginal utility of the last unit consumed was equal to the price, the marginal utility of previous units purchased was greater

But they were still purchased at the same price as the first unit

Thus, the earlier units produced “utilite relative”, or surplus utility

He graphed it out, and Marshal later turned this into consumer surplus

Note, for Dupuit, all surplus was consumer surplus

Monopoly Price Discrimination

He did much of his engineering work on public works – roads, bridges, dams

So he asked the question, what should the state charge for its services?

Not what is the profit maximizing price, at least at first

So to maximize total utility, charge a price of zero....

But this will not allow you to cover costs

What if you charged enough to cover costs? He assumed a fixed cost goods...

So you could charge where MU is equal to the cost of the good.

Would that result in the maximum amount of consumer surplus?

No, you could instead charge two diff prices, above and below

Which would actually increase utility

This dual pricing is what we now call price discrimination

He thought the govt. could do it, but private firms could not...

(insert graph ch12c here)

Johann von Thunen

German, studied at university before purchasing an estate in Mecklenburg

Where he farmed, and then wrote about it

He developed “location theory” – what will cultivation look like

Imagine a “town”, it is isolated and does not trade

What will cultivation look like around it?

Two key variables – how bulky is a good, and how perishable.

Bulky goods are expensive to transport – produce close to town

Perishable goods lose value quickly – produce close to town

From this, he developed the concept of zones of production

This developed into agricultural economics

Understood that more labor had declining marginal value

But this depended on how perishable a product was.....

Noteworthy because of his methodology

An idealized town....

Two variables

Much richness in detail emerged

And could be compared to actual towns