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CONFERENCE ABSTRACT BOOK

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developing country for this analysis is that, a country level analysis of the impact of intellectual property rights on capital accumulation has shown that, as well as macroeconomic indicators, the amount of intellectual property rights also explains the differences in capital accumulation in both developed and developing countries. In the countries where IP laws are stronger, it is observed that countries benefit from FDI inflows where IPR are stronger. The second reason behind the choice of countries is that, various empirical studies have shown that companies with greater intellectual capital performs better in the UK and Turkey. For the UK, the main focus of the study is English law and EU laws where relevant as well as international agreements. As a result, it is found that there are on-going works on improving the IP laws in order to comply with the EU accession criteria and international obligations on intellectual property rights protections. However, the enforcement needs to be strengthened in order to provide efficiency in the use of the written laws.

Keywords: Intellectual Property Rights, Turkish Intellectual Property (IP) Law, English IP Law, EU IP Law

[OP-169]

A novelty on unlocking businesses' potential growth: Intellectual Property Securitisation

Ilayda Nemlioglu

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There have been on-going attempts in finance sector in order to create different financial instruments. Asset backed securitisation took attention especially in the recent global financial crisis which was caused by the collapse of mortgage bubble. However, securitisation could be beneficial if used for intellectual property rights such as patents or trademarks. In this study, we aim to investigate advantages and disadvantages of intellectual property securitisation by looking at various cases starting from the famous "Bowie Bonds". It is found that methods such as tranching or bundling could reduce the risk of IP security deals. Also, different pricing strategies of patents such as real-options pricing are analysed. To sum up, IP securitisation still has profit potential as long as it is done by taking lessons from the global financial crisis.

Keywords: Securitisation, Bowie Bonds, intellectual property rights, asset-backed securitisation

[OP-170]

Investigation of The Relationship Between Brand Value And R&D Activities: Fortune 500 Companies Analysis

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In the global world where technology is developing very rapidly, consumption has also increased at the same rate. Information can reach to the other side of the world in an instant, consumer goods can be delivered to the other end of the World in a very short time. Producers are also in a serious competition in the global environment where rapid consumption is achieved. This situation has become a strategy to ensure that consumers become a brand consuming society in the sense of marketing. In order to respond to this consumption approach, companies have focused on R & D strategies to provide innovative technology-based products. To make a relationship between R & D as an innovation output and brand as a consumption input, the brand value and R&D expenditure relation will be examined.

Keywords: R&D, patent, brand value, panel data

[OP-171]

Protection of Intellectual Property In Cloud Computing

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Cloud computing, the most popular technology of recent times, has become a term we have heard since the mid-2000s. Although it is not a coincidence that this technology is called cloud, this usage may cause misconceptions, especially in the context of copyright. Because the data stored in cloud computing, doesn't dissolve in the air like water vapors stored in geographical clouds. The case law of the ECJ in the case of "UsedSoft", which deals with the online distribution of used software, as well as the decision "VOB / Stichting" which deals with lending of EBooks over the Internet, shows what such an understanding of digital storage can lead to. Both decisions are decisively influenced by the assumption that there are "non-physical copies" or "carrierless copies" whose transfer is functionally comparable to the distribution of physical copies.

Today, cloud computing is replacing copyrighted works on the local devices of users. This applies to music, cinematographic works, as well as texts such as e-books. Unlike old times individuals can reach all of the works we have mentioned by cloud computing whenever and wherever they want.

It is obvious that the usual methods used to provide intellectual property security are inadequate in cloud computing platforms. In this context, methods such as letting cloud providers develope their own virtual IP Rules or legislating the notice and take-down rule in local regulations can be used. However it should be noted that in the light of technological developments, the protection methods we will foresee today may become dysfunctional in 10 or 15 years and the legal systems should continue its dynamism as well as the developing technologies. In our study, we will evaluate the conservation methods available in comparative law in the light of court decisions and try to shed light on the deficiencies.

Keywords: Intellectual Property, Cloud Computing, IT Law

[OP-173]

New Keynesian Models Explaining Ineffiecient Aggregate Demand

Ozlen Hiç

Istanbul University, Economics Faculty

According to New Keynesian economists, inflexibility of prices and wages are observed due to imperfect competition in markets and this creates ineffiecient demand. New Keynesian economists, while doing these investigations, identified several reasons for these inflexibilities and developed several "models". Certain New Keynesian models can be valid for one reason and the other one can be valid for another reason. Most of the reasons and models are not contradictive and acceptation of one does not necessarily require rejection of the other. In other words they are not mutually exclusive, instead they can be considered mutually inclusive.

Keywords: New Keyneian Economics, New Keynesian Models, Hysteresis Models, Efficiency Wage Models, Menu Cost Models

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Evolution of New Keynesian Economics

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Abstract

In this article, the developments in the New Keynesian Economics which sprang up in USA during the ‘80s will be discussed and then the properties of the Keynesian Economics in terms of their assumptions and models will be analyzed.
New Keynesian Economics is based upon the Keynesian System also considers that when the economy left to itself it will settle at less-than full-equilibrium in the short-run. Even though most of the New Keynesian economists accept rational expectations hypothesis, they refuse the perfect competition conditions and perfect elasticity of prices and wages. Hence the imperfect competition and the rigidities of prices and wages will result in the Keynesian lack-of effective demand as well as coordination failure in the market .For the long run, following the Neo-Keynesian economists, they suggest that the economy will tend towards automatic natural-rate-of-unemployment (nru) equilibrium in the long-run, apart from a few New Keynesian economists who work with Hysteresis and Efficiency Wage models. New Keynesian Economics provide the consistency between the micro- and macro-analysis and seem to be more realistic and valid for the developing countries. The representatives of the New Keynesian Economics are Alan S. Blinder, N. Gregory Mankiw, John Taylor, David Romer.

Peer-review under responsibility of the scientific committee of the 3rd World Conference on Technology, Innovation and Entrepreneurship

Keywords: New Keynesian Economics; Birth of New Keynesian Economics, New Keynesian Models, Evolution of New Keynesian Economics

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1. Introduction

The term "New Keynesian" was firstly used by Michael Parkin (1982). The use of "New" instead of "Neo" had a definite purpose; the New Keynesian economists would like to distinguish themselves clearly from "Neo-Keynesian economists" (Samuelson, Tobin, Modigliani, Solow etc.) because New Keynesian economists generally – with a few exception who adopted the hysteresis and efficiency wage models later- accepted the conclusions of the Neo-Classical Synthesis that the economy would automatically come to "natural-rate-of-unemployment equilibrium (ANRUE) in the long run LR. Nevertheless, contrary to the Synthesis Keynesians or Neo-Keynesians (hydraulic Keynesians) who followed Keynes and left their analyses on a macroeconomic level, the New Keynesian economists, just like the New Classical economists, included the microeconomic analysis within their macroeconomic system. They tried to establish microeconomic basis for their macroeconomic analysis. For this reason, New Keynesian economists differ from Neo-Keynesians in terms of their "methodology". However, through their analyses (IC instead of PC, P and W-inflexibility instead of P and W-flexibility, and the lack of coordination between markets instead of Walrasian Auctioneer), they reached again the Keynesian result NANRUE as opposed to the New Classical economists who reached the Classical result, ANRUE.

For this reason, the New Keynesian economists called themselves "New" Keynesian in order to indicate their differences and their opposition to the "New" Classicals, which they regarded as their main competitors. Thus, the term also distinguished themselves from the previous generation of "Neo"-Keynesian economists who only worked with macroeconomic analysis.

2. Factors Leading to the Birth of New Keynesian Economics

Since the '80s, Monetarism and New Classical School have fallen from favor in the academic circles and two opposing views began to be widely accepted: New Keynesian Economics based upon the Keynesian System (in USA) and Post- Keynesian Economics based upon the Keynesian system (in Britain).

The main factors leading to the birth or rather spread of New Keynesian Economics, are institutional and political. These reasons can be recalled as below:

2.1. Re-Introduction of the Phillips Curve

The '70s witnessed constant prices rises because of OPEC that lead to a rise also in the Phillips Curve (PC) proven by New Keynesian econometricians (Gordon); hence PC, once again, was used for the short-run (SR) and the long-run (LR) and was included in the analyses. Accordingly, the New Classical claim, "The Great Fallacy of Keynesian System" by Lucas and Sargent, has been refuted. Later, Blinder who is one of the most important representatives of the New Keynesian Economics considered this misinterpretation of PC by the New Classicals as "The Greatest Fallacy of New Classical Economists".

2.2. High Unemployment Rates despite Strict Monetary Policy

Until the '80s, despite the high level of unemployment in USA and in Britain, strict monetary policy was being implemented and the government intervention was at the minimum as in accordance with Monetarist and New Classical policy recommendations; however, neither inflation nor unemployment decreased. Yet, during Thatcher's government in Britain, the number of unemployed roses from 1.1 million to 3 million. This consolidated the belief in the academic circles that the results of New Classical and Monetarist "automatic-full-employment equilibrium (AFNE)" assumption and their policy recommendations were wrong; whereas the Keynesian "less-than-full-employment equilibrium (or unemployment equilibrium, UNE)" assumption and Keynesian policies were realistic.

2.3. Building a Bridge between Microeconomics and Macroeconomics

New Keynesian economists accepted the "inconsistency" of the Keynesian macroeconomic analysis with the micro analysis, which was considered as a "fallacy" of the Keynesian System by the New Classical economists, hence they concentrated on this issue and filled this gap within the Keynesian System.

However, New Keynesian economists accepted "Imperfect Competition (IC) conditions" in their microeconomic analysis which seems to be more valid for today's markets and therefore they refuted the assumptions of "full flexibility of Prices (P) and Wages (W)", "Perfect Competition (PC)"and the "Walrasian Auctioneer". The inflexibility of P and W due to IC will lead the economy to the Keynesian lack of effective demand and UNE. In addition, even if the PC conditions are valid in all the markets, this time, "the lack of coordination between markets" might occur that means, even if the P and W may not necessarily be inflexible, they cannot change immediately and/or at the desired rate hence leading to "involuntary unemployment" due to the lack of effective demand, particularly in the short-run. In this case, the government should intervene through Keynesian fiscal policies.

For many younger generation academics, the New Keynesian Economics is as interesting as the New Classical School because the New Keynesian Economics extensively includes mathematical analysis, particularly in the microeconomic analyses.

2.4. Logic behind SR Government Interventions accepted by Conservative View

Despite the "conservative view" that was dominant especially in USA, Keynesian policies suggested by New Keynesian economists did not receive considerable reaction because the New Keynesian economists could show the logic behind the necessity of government intervention that was particularly needed for the SR. Similarly, New Keynesian economists, with respect to the "the distribution of income", have more rightist tendencies on the political spectrum and locate themselves between the Central Left and Centre compared to the Keynesian System in general and the Post-Keynesian Economists in particular.

2.5. Invalidity of Rational Expectation Hypothesis and Flexible Prices & Wages

Even though the "rational expectations hypothesis (REH)" which is one of the two major assumptions of the New Classical School, was accepted by most of the New Keynesian economists - to eliminate the discussion topics-, econometric analyses have not yet confirmed the validity of REH; instead they showed that REH is more likely "invalid".

The second major assumption of the New Classical School is the assumption of full flexibility of P and W but this assumption has been refuted as IC was identified more spread in all the markets. New Keynesian economists showed that P and W are not inflexible, but they do not change enough which is the main reason for Keynesian UNE in the SR.

2.6. Wages and Unemployment Rates are Pro-Cyclical

The progress of real wages in time is also far from the assumptions of the New Classical economists based on the Traditional Classical analysis because, according to these systems, when there is unemployment (un-N) in the economy, the reason is the high wages. Accordingly, the wages were expected to be contra-cyclical. However, the wages seemed to be "pro-cyclical" with relatively soft fluctuations. This de facto progress of the real wages can easily be explained within the context of the Keynesian System; for example, the aggregate demand (AD) may increase due to the technological developments and due to the increases in investments and therefore, labor unions can increase the real and nominal wages to some extent with respect to the increase in N. Then again, this wage-increase may partially compensate the increase in the labor costs due to their high marginal consumption propensity. On the other hand, during low levels of income, labor unions will prevent the wages to decrease too much.

3. Basic Assumptions of New Keynesian Economics

The foundations of the New Keynesian Economics are based upon the following assumptions:

3.1. Imperfect Competition Conditions and Lack of Coordination between Markets

In all markets in the economy, IC conditions prevail. Even if the P and W are not fully inflexible, they are not flexible in the SR to provide ANRUE.

There is lack of coordination between markets: Walrasian Auctioneer is not valid.

According to these assumptions, the New Keynesian economists claim that the economy will settle at NANRUE due to the lack of AD and there will be involuntary unemployment, particularly in the SR.

For the LR, New Keynesian economists are divided into two groups:

In the early ‘80s, the majority of New Keynesian economists accepted the fact that economy in the LR would tend towards ANRUE. The first group of New Keynesian economists’ thoughts were in line with the Neo-Classical Synthesis Keynesians (or Neo-Keynesians).

However, the other group of New Keynesian economists, who accepted the “hysteresis” and “efficiency wage” models stated that the economy, in the LR, does not automatically reach ANRUE but settle at UNE. The models of the second group of New Keynesian economists are totally compatible with Keynes’s original ideas, therefore, these models are also called “Super-Keynesian models”.

The New Keynesian economists essentially accept that in the SR, there will be involuntary unemployment due to lack of effective demand and this can be prevented or at least reduced by Keynesian monetary and/or fiscal policies. Most of the New Keynesian economists, however, accept that in the LR, the economy will tend towards ANRUE, however, most of the time the economy will face involuntary unemployment due to lack of effective demand. In this case, waiting without intervention until the economy tends towards ANRUE in the LR would cause even bigger problems than the unemployment problem itself as unemployment continues in the long run. For this reason, the government should continuously intervene to economy with Keynesian policies.

3.2. Rational Expectations Hypothesis

All the New Keynesian economists followed New Classical economists and accepted REH. There are two strategic reasons lying behind this recognition of some New Keynesian economists that actually do not believe in REH:

First, New Keynesian economists desire to reduce points of discussion with New Classical economists because New Classical economists consider that models that do not recognize REH as “non-scientific” and passionately exclude them from discussions.

In addition, according to New Keynesian economists, the basic reason for NANRUE is not Keynesian effective demand insufficiency but inflexibility of P and W. Stanley Fischer and Taylor proved this on their models. This is the second strategic reason for New Keynesian economists to recognize REH.

Even if REH is valid, the existence of inflexibility of P and W will lead to unemployment due to Keynesian effective demand insufficiency. Therefore, government intervention in the context of Keynesian policies will brings positive outcomes.

With the acceptation of REH, New Keynesian economists methodologically prefer “atomistic analysis”, in other words they put macroeconomic analyses on the bases of microeconomic analyses. In addition to rationality of units or the purpose of profit and/or utility maximization, they assume that such units have full information or acquire necessary information easily and without expenses to make decisions. Both laborers and entrepreneurs are not wrong about their future expectations concerning prices. Entrepreneurs, while they are making decision for investment and production, they can accurately predict the future as “Bayesian probability set”.

However, New Keynesian economists know that REH does not accurately reflects reality and econometric studies have not yet proved the existence of REH. In some cases, they suggest models consisting of near-rational behaviors.

3.3. Inflexibility of Prices and Wages

NRU, instead of full employment, was first claimed by M. Friedman. It was accepted by New Classic economists. According to M. Friedman, let the state increases money supply, the economy would tend towards to ANRUE in the long run (following period) due to “the assumption of adapted expectations”. For New Classical economists, would tend towards to ANRUE with PC and full flexibility of P and W in line with the Walrasian assumptions of auction.

Most New Keynesian economists recognize the concept of NRU instead of full employment. Despite REH, the main factor that economy does not fully come to the balance on the point of NRU, is the spread of IC on markets, flexibility of P and W and at the same time “lack of coordination between markets”.

3.4. Significance Level of Assumptions

Almost all New Keynesian economists accepted REH for strategic reasons although it is not in the Keynesian System and not verified by econometric studies. Taylor and Fischer recognized REH in their models but at the same time, considering the assumption that P and W are inflexible, they proved Keynesian effective demand insufficiency oriented involuntary unemployment despite the existence of REH and the effectiveness of Keynesian policies in this situation.

Therefore, New Keynesian economists started with the assumptions of REH and P and W’s flexibility, which was theoretically considered equally important by the New Classical School and showed that the assumption of P and W’s inflexibility is more important and REH’s validity is not a matter of question.

4. Policy Recommendations of New Keynesian Economists

Policy recommendations of New Keynesian economists can be observed in a large spectrum.

Most of the New Keynesian economists recommend fiscal policy. Nevertheless, New Keynesian economists are not as optimist as early Keynesian economists who believe that PE will enable the right choice between inflation and unemployment rates and the increase in aggregate demand can be adjusted accordingly. In macroeconomics the term for such adjustments are called fine-tuning. However, most New Keynesian economists doubt that due to uncertainties only coarse tuning will be possible, that is, through economic policies, unemployment or inflation will be reduced even though not at the exact rate; and it is always better than no intervention.

New Classicals however, are insistent that state should not pursue any policy. According to New Classicals if state pursues predictable policies, then economic units predict these accurately beforehand and include these assumptions in their expectations. Therefore, the effectiveness of these policies remains zero. This objection of New Classicals is valid both Keynesian and New Keynesian policy suggestions and well as Monetarists’ policy suggestion about increase of money supply with a constant speed.

In general, most of the Keynesian economists by following the Keynesian System, offer monetary and fiscal policies in order to reduce unemployment and moderate conjectural waves. Accordingly, fiscal policy is applied during depression whereas monetary policy would be more effective during recession occurred for high income levels. In inflation, both monetary and fiscal policies should be applied simultaneously.

Nevertheless, many New Keynesian economists, who assume that political and fiscal policies causing economic problems only recommend monetary policy. Accordingly, fiscal policy is a matter of parliamentary laws, hence there can be delays and fiscal policy can be ineffective. In addition, it is difficult to adjust fiscal policy constantly according to the changes in AD. Furthermore, fiscal policy, which includes increase in interest rates and decrease investments, can cause crowding-out effect.

New Keynesian economists, who recommend constant implementation of monetary policy, also recommend small and balanced budget; education and health services should be taken in accordance with this balanced budget.

For Keynes and early Keynesians, their answer is clear concerning the question: Which is more important social problem, unemployment or inflation? For them, certainly unemployment is more important social problem. However, New Keynesian economists, in today’s economic environment in which globalization, costs and productivity have become prominent, recognize inflation as a more important economic problem than unemployment. These New Keynesian economists, again, recommend monetary policy rather than fiscal policies against inflation.

At first glance, New Keynesian economists, who see inflation as a serious problem and recommend only monetary policy rather than fiscal policy, hence are more are more conservative, may resemble the Monetarists. However, it is deceptive because Monetarists suggest that money supply should be increased constantly and according to a predefined rate that was previously set (non-discretionary). New Keynesian economists, on the other hand, suggest that the rate at which of money supply will be changed should be increased or decreased (discretionary).

As these above-mentioned explanations indicate, political stance of New Keynesian economists varies from Center-Left and Center and even to Center-Right in the political spectrum.

New Keynesian economists, who recommend fiscal policy to decrease unemployment during depression and who recommend monetary policies during recession and inflation, are politically located at the Center-Left. "Conservative" New Keynesian economists pay more attention to inflation and believe that this can only be achieved through monetary policies. They also claim that a small and balanced budget should be maintained. These New Keynesian economists are politically located at the Center or Right-of-Center.

In USA, some New Keynesian economists support Democratic Party representing a spectrum ranging from Center to Center-Left and some support Republican Party representing ranging from Center or Right-of-Center to Right.

5. Classification of New Keynesian Models

Different New Keynesian economists have come up will different models that lead to the conclusion of Keynesian unemployment. New developments in theory all in progress will supply micro foundations for New Keynesians Economics and at the same time push macro theory in a Keynesian direction and certainly away from perfect competition, Walrasian equilibrium and the price auctioneer. A grouping of these different models is offered below following A. Blinder:

- Monopolistic Competition
- Efficiency Wages
- Fixed Costs and Inertia
- Hysteresis

The volumes of New Keynesian Economics by G. Mankiw and D. Romer that brings together the more notable articles and models, on the other hand, offers the following classification:

- Costly Price Adjustment (this includes the model offered by G. Mankiw on small Menu Costs and large business cycles).
- The Staggering of Wages and Prices (this includes both Stanly Fischer and also John Taylor who worked with the RE along with long-term contracts on nominal terms leading to rigid priced and wages).
- Imperfect Competition (this includes Oliver Hart "A model of imperfect Competition with Keynesian features" and O.J. Blanchard's and N. Kiyotaki "Monopolistic Competition and the Effects of Aggregate Demand").
- Coordination Failures (including John Bryant "A Simple Rational Expectations Keynes-type Model").
- The Labor Market (This includes Janet L. Yellen "Efficiency Wage Models of Unemployment"; Alan B., Krueger and Lawrence H. Summers "Efficiency Wages and the Inter-Industry Wage Structure"; Castes Azaiadis and Joseph Stiglitz "Implicit Contracts and Fixed Price Equilibria", and O.J. Blanchard and L.H. Summers "Hysteresis in Unemployment".
- The Credit Market (this includes J.H. Stiglitz and Andrew Weiss "Credit Rationing in Markets with Imperfect Information", "Credit, Money and Aggregate Demand" by Ben S. Bernanke and Alan S. Blinder.
- The Goods Market (this includes "Price Rigidities and Market Structure" by J.E. Stiglitz).

A scrutiny shows some differences of approach in the classification offered by A. Blinder versus the classification offered by Mankiw and Romer. Nonetheless, both have included the more up-to-date and acceptable models involving:

- Menu Costs
- Imperfect Competition (short-run vs. long-run)
- Constant Price Contracts or Price Rigidities
- Coordination Failures between markets
- Mark-up Pricing

- Financial Market Rigidities (rigidities of the financial markets)
- Labor Market and Bilateral Monopoly with the following models or features
- Efficiency Wages
- Insider-Outsider Models leading to Hysteresis
- Human Capital models leading to Hysteresis

6. Conclusion

As A. Blinder also remarks, the work is still in progress and the final word has not yet been formulated, but New Keynesians are certainly on the correct path and their work leads to fruitful results explaining the micro foundations for Keynesian macroeconomics. Some of the models may be mutually exclusive while some models could be joined and compatible with each other. But a single model involving most of all the above has not yet been developed. Certainly, although the final word is yet to come, the New Classical School have fallen from favor because it does not square with empirical facts. Even though it may be a very pure and consistent theory. On the other hand, most of the models offered by New Keynesians explain facts or at least parts of empirical observations, hence, they have now the prominence in the academic world once more. In the field of practitioners of economics, on the other hand, Keynesian macroeconomics was always wide-spread and widely used.

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