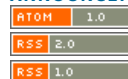


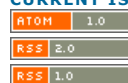


International Journal of Progressive Sciences and Technologies

ANNOUNCEMENTS



CURRENT ISSUE



Journal Help

USER

Username

Password

Remember me

JOURNAL CONTENT

Search

Search Scope

All

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)

NOTIFICATIONS

- [View](#)
- [Subscribe](#)

FONT SIZE



INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

KEYWORDS

[Academic Achievement](#)
[Achievement Benin](#)
[Competence](#)
[Component Covid-19](#)
[Development Effect](#)
[of Teaching Formatting](#)
[Gender Income](#)
[Industry 4.0, society 5.0,](#)
[digital society, digital](#)
[technology, freelancing,](#)
[households, virtual,](#)
[internet freelance, IT,](#)
[online platform, digital](#)
[platform, digital economy,](#)
[freelance exchange,](#)
[Jigsaw Learning Biology](#)
[Malaria PBL Problem](#)
[Based Learning](#)
[Quantitative Real-Time](#)
[PCR Method SARS-Cov-](#)
[2 Style Validity](#)

HOME ABOUT LOGIN REGISTER SEARCH CURRENT
 ARCHIVES ANNOUNCEMENTS CALL FOR REVIEWERS PAPER
 SUBMISSION INDEXING & ABSTRACTING ##PUBLICATION FEES##

Home > Archives > Vol 24, No 1 (2020)

Vol 24, No 1 (2020)

Table of Contents

Articles

Construction Of A Mathematical Model Of The Geometric Nonlinear Problem Of A Vibrating Beam Murodilla Olimov, Dadajon Boqijonov	PDF 01-07
Growing Vegetable (Sweet) Corn Varieties And Hybrids As A Reproductive Crop S.T. Sanaev, I.A. Saparniyazov, I.I. Rakhmatov	PDF 08-10
The Importance Of A Synergistic Approach In Management Akhmedov Rakhmonjon	PDF 11-14
The Role Of Inheritance In Development Mamatov Obidkhon Vaqqosovich	PDF 15-19
Formation Of Phoneme Paradigms On The Basis Of Category Of Intensification/Deintensification In The Language Ziyayev Avazjon Ikhtiyorovich	PDF 20-25
Efficiency Of Using The Method Of Illustration In The Classes On Phonetics Of Modern Russian Literary Language In Higher Educational Institution L.B. Polovina	PDF 26-28
Attempt to Destroy the Value System in a Personal Device Atadjanov Mamirjon Yusupovich	PDF 29-31
A Performance Review of a High Altitude Long Endurance Drone Ali Dinc, Rani Taher, Mehdi Moayyedean, Abdullah Bushehri, Abdulrahman Alruwayeh, Abdulrahman Alsaeedi, Ali Alali, Fawaz Alsarraf	PDF 32-39
The Role of Keywords in Disclosing the Meaning of Artistic Text Popova Elena SobirovIvanovna	PDF 40-42
Enrichment of The Lexico-Phraseological Resource of Students - Inophones Mirzayunusova Ziyoda Ibragimovna	PDF 43-45
Role of Modern Educational Technologies in the Education System Kakharova Nilufar Nuridinovna	PDF 46-50
Perceptions Endogènes des Populations sur les Réalités Hydro-Climatiques dans la Basse Vallée de l'Ouéomé (BVO) ATMADE Sèlomé Hilaire S., ATCHADE Gervais, HEDIBLE Sidonie, VISSIN Expédit Wilfrid	PDF 51-57
Development of National Tourism Maxammadjonov Saidjon Farxodjon o'g'li	PDF 58-63
Computational Algorithm for Solving of Problem the Two-Phase Filtration Dilmurod Tuhtanazarov, Kuyliyeva Feruzakhon, Akbarjon Ahmadjonov	PDF 64-70
The Analysis Of Lexical-Semantic Variants Of Kinship (Wife, Stepmother) Expression Means In Female Gender Karimova Vasila , Vakhobovna	PDF 71-72
The Theme Of The Lost Human Personality In F.M. Dostoevsky Oeuvre Goncharova Nina Vasilievna	PDF 73-75
Etude Comparative Des Facteurs D'émission En Gaz A Effet De	PDF

ISSN:2509-0119

ISSN-L: 2509-0119

ResearcherID: J-1399-2016



Impact Factor:

ICV = 80.38

SJIF = 5.616

IFSIJ = 7.625



Indexing & Abstracting

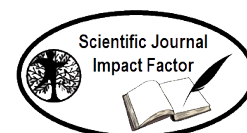


Serre Des Produits De Terre Cuite Artisanaux Et Semi-Industriels Randrianarison Patricia Mino, N. Randrianandrasana, A. Tsioritiana, B. Raheliarilalao	76-86
Determination Of Prospective Coconut Processed Products To Developed In Sungai Geringging Sub-District Padang Pariaman District Rahma Dzulqa, Gunarif Taib, Rika Ampuh Hadiguna	PDF 87-95
Knowledge Awareness and Consequences on some Allied Factors of Uterus Diseases for Ever-Married Women in Kola Union, Badalgachhi, Naogaon District of Bangladesh Dilip Kumar Mondol, Provash Kumar Karmokar	PDF 96-109
Assessing the Impact of Social Distance on Skin Condition during COVID-19 Pandemic Based on an Online Survey Naga Harika Korrapati, Priyanka Bhowmik, Pavithra Balakrishnan, Jahnvi Shah, Luiza Gabunia	PDF 110-125
The Influence of Organizational Climate on Knowledge Sharing Intention in PT PLN Main Development Unit of North Sumatera Yenni Roeshinta, Emmy Mariatin, Sherry Hadiyani	PDF 126-138
Micro-Crédit et Changement Social au Bénin : l'Exemple de la Coopérative pour la Promotion de l'Épargne et du Crédit (CPEC) à SORI AGUIA DAHO Jacques Evrard Charles, SINA D. Ilyass	PDF 139-148
Development of Guidance and Counseling Information Service Toolkit to Anticipate the Spread of Covid-19 at School Asni Mardin, Daharnis Daharnis, Afdal Afdal	PDF 149-154
Problem Analysis And Needs Electronic Student Worksheet Based On Android Biology Material In SMAN 3 Padang Nisa Al Mukarromah, Abdul Razak	PDF 155-162
The Effect of Resilience and Gratitude on Psychological Well-Being of male Afghanistan refugees in Medan Dhebby Edriany, Raras Sutatminingsih, Rodiatul Hasanah Siregar	PDF 163-166
The Influence Of Skill Aspect On Vocational Education Graduates For Improving Job Achievement In The Era Industry 4.0. Heri Sudarmaji, I Wayan Susila, Any Sutiadiningsih	PDF 167-174
Emotion Detection Using EEG Signals Rustem Popa	PDF 175-182
The Comparison Study Of Cathodic Protection System Of Victim Anoda Between Zink Anoda (Zn) And Aluminum Anoda (Al) Sutrisno Sutrisno, Avando Bastari, Okol Sri Suharyo	PDF 183-193
Preliminary Study on River Water Change To Determine Map Datum of Musi River Palembang Okol Sri Suharyo, Avando Bastari	PDF 194-201
Knowledge of Shisha-Aided Flavoured Tobacco Smoking, Health-Risk in Public Universities in Rivers State G. S. A. Jones, DR. J. O. Onyезere	PDF 202-209
Andragogical Model Of Qualification Of Qualifications Of Teachers Of Preschool Educational Organizations Iskhakova Mavlyuda Rakhmanovna	PDF 210-213
Characteristics Of The Production Potential Of The Enterprise Jalilov Bahrom Sotiboldievich	PDF 214-218
Application Of Venn Diagrams In Lectures On Theoretical Mechanics Zokirjon Mahmudov	PDF 219-222
Issues Of Development Of Freelance Activities In The Context Of Development Of The Digital Economy Lutpidinov Shukhrat Zakirdjanovich	PDF 223-228
The Effect of Perceived Organizational Support and Optimism on Job Insecurity in Contract Employees Rica Amelia, Abdhy Aulia Adnans, Siti Zahreni	PDF 229-233
The Validity of the Development of Integrated Islam and Science Learning Module completed with a Concept Map for Integrated Islamic Junior High School Nurhajah Sintia, Violita Violita	PDF 234-239
Traditional IMBO In The Middle Of The Sweet Cassiaverra: (Indigenous Institution Lekuk 50 Tumbi Lempur, Gunung Raya Sub-District, Kerinci Regency In Preservation Of Customary Forests 1960-2018) Netorial Netorial, Azmi Fitrisia	PDF 240-245
Nutritional Composition and Phenolic Compound Profile of Three Different Sudanese Rice Types Denoted Locally as Crown, Narica and Pabenjeda Maha Abdalla Mohamed Ibrahim, Barka Mohammed Kabeir	PDF 246-252
Possibilities of Introduction of Hunting Tourism in Hunting Farms of Bukhara Region Rashit Rakhimovich Rakhmonov, Zulfikarov Abdurayim Naimovich, Nasiba Ismailova Khudoikulova	PDF 253-256
The Creative Development's Background for a Modern Teacher Within the Innovation Epoch	PDF 257-263

RESEARCHERID

INDEX
COPERNICUS

PKP|INDEX

CiteFactor
Academic Scientific Journals

TOGETHER WE REACH THE GOAL



Partners

Kurbanov Ihtiyor Hikmatovich	
Self-Healing Methods in Smart Grids	PDF
Mehmet ÇINAR	264-269
Production D'alcaloïdes Et Croissance Des Organes De Balanites Aegyptiaca Del. En Culture In Vitro	PDF
Abdoulaye Hassane, Togola Issiaka, Mamadou A Konaré, Nouhoum Diarra, Mohamed S Maïga, Seydou Z Maïga	270-277
FACTS Controllers in Electric Power Systems and Effects of STATCOM Controller	PDF
Mehmet ÇINAR	278-282
Effluence, Deposit Transport and Dredging of the Karnaphuli River – a review	PDF
Mohammed Mostafizur Rahman	283-295
To Improve The Approaches Of The Personnel Management Mechanism In The Light Industry	PDF
Usmanova Zulfiya Musaevna	296-299
Effective Use Of Afghan Sheep In Creation Of Athars High Quality Karakul Sheep	PDF
Shonazarov Dilmurod Babirovich, Boboqulov Nasillo Asadovich, Jumanov Sobir Murodovich	300-302
Stress-Deformed State Of Partially And Fully Water-Saturated Soil Base	PDF
Yakubov M. M., Fayzulla A. I.	303-307
Types And Description Of Weeds Distributed In The Grain Crops Of The Zarafshan Valley	PDF
Rizayev Shuxrat Xudoyberdiyevich, Buriev Abdivakhob Abdirazzakovich	308-311
Heat And Humidity Treatment Of Concrete In Hot Climates	PDF
A.M. Raximov, X.L. Alimov, A.A. To'xtaboev, B.A. Mamadov, K.K. Mo'minov	312-319
Space And Time As Forms Of The Being Of Nature	PDF
Arislanbaeva Zoya Ernazarovna	320-322
Development Of Computer Media For Interactive Learning Course Pump And Compressors Application In Students Of D3 Mechanical Engineering Program	PDF
Adi Bandonno, Okol Sri Suharyo	323-336
The Influence Of Job Insecurity on Pscyhological Well-Being of Outsourcing Employees	PDF
Izura Rochma, Emmy Mariatin, Sherry Hadiyani	337-344
Concept And Conceptosphere As Objects General And Comparative Linguistics	PDF
Nosirov Otabek Timurovich	345-351
Impact of Beamforming on the Average Throughput of 802.11ac in Wireless Local Area Network (WLAN).	PDF
Nwafor Oluch Christiana, NNebe Scholarstica Ukamaka	352-358
Animation-Based Learning Media for Thematic Learning of Elementary School Students	PDF
Arry Patriasurya Azhar, Meutia Rifqi Larasati	359-364
Physicochemical Properties of Margarine Containing Gambier Extract as Antioxidant	PDF
Latifa Aini, Tuty Anggraini, Rini B	365-370
Mechanisms To Improve The Competitiveness Of Higher Education Institutions	PDF
Annakulov Kamol Khasanovich	371-374
The Role And Role Of Innovative Clusters In The Context Of Economic Digitalization	PDF
Xolmuratov Salimbek Eshbekovich	375-379
Methods Of Education And Training Of Work-Based Learning	PDF
Shukhrat Nasimovich Shukurov	380-384
The Success Of Team Collaboration In Supporting Systems For Development Of Project Management Learning Model	PDF
Adi Bandonno	385-393
The Comparison Cognitive Competency Between The Application Problem Based Instruction (PBI) Learning Model With Creative Problem Solving (CPS) Based Prior Knowledge From Class XI Students Of Adabiah Senior High School Padang	PDF
Novia Indra, Dwi Hilda Putri	394-400
The Importance of Actor Capacity Improvement in Village	PDF



Sustainable Tourism Business Through Marketing Communication Based On Social Media Hudi Santoso, Amiruddin Saleh, Musa Hubeis, Wahyu Budi Priatna	401-408
The Use Of New Types Of Waterproofing Pipes Mirkhanova M.M.	PDF 409-412
Activités Agricoles Et Dynamiques De L'occupation Du Sol En Milieu Rural (Commune De Lalo) Josias ADEGNANDJOU, Guy BASSE, Dr Abdoul-Ramane ABDOLAYE, Dr. Bernard FANGNON, Prof Moussa GIBIGAYE	PDF 413-430
The Economic Significance Of Educating Young People In The Spirit Of Entrepreneurship In Modern Uzbekistan Muhammadamin Abduvasitovich Akhunov	PDF 431-435
Language and Communication Models Ravshonbek Khudaybergan-ugli Khudayberganov	PDF 436-440
Influence Of Repeated Sowing On Agrophysical Soil Properties, Water Permeability And Yield Of Winter Wheat Buriev Abdivakhob Abdirazzakovich, Oripov Razzok Oripovich, Rizayev Shuxrat Xudoyberdiyevich	PDF 441-443
Substantiation Of Loosening The Soil With A Subsoiler During Soil Processing For Sowing Melons And Gourds Under A Closed Film Tunnel Farmon Mamatov, Khayriddin Fayzullayev, Dilmurod Irgashev, Sodik Mustapaqulov, Matluba Nurmanova, Lola Hamrayeva	PDF 444-450
The Results Of Experimental Studies Of Housings With Guide Plates For Processing Sowing Zones Of Melons And Gourds Dustmurod Chuyanov, Gayrat Ergashov, Golib Shodmonov	PDF 451-456
Les Partenariats Public-Privé Au Cameroun: Comment Assurer Une Meilleure Gestion Des Infrastructures Sportives ? Fobasso William	PDF 457-462
On One Conditionally Correct Cauchy Problem I. A. Gafarov	PDF 463-468
Comparative Analysis Of The Effectiveness Of The Treatment Of Parodontitis In Patients With Obesity D. Sh. Hamroeva	PDF 469-472
Effective Organization Of Education For Pupils Who Have Difficulty Learning Different Activities Nazira Mamatova	PDF 473-477
Linguistic Landscape Study at Maitreyawira School in Medan Ismi Novitasari Sinaga, Eddy Setia, Deliana Deliana, Ridwan Hanafiah	PDF 478-488
The Mediating Role Of Knowledge Transfer Between The Relationship Of Training And Accepting New Technology In The Era Of Industry Revolution 4.0 Mohammed Kamruzzaman, Mahmud Hamid	PDF 489-496
College Student's Behavior At Diploma Program Of IPB In Searching Reference That Needed To Finish The Study And Thesis Suparman Suparman, Hari Wijayanto	PDF 497-509
Embedded Devices Overview: Does Security Match The Evolution Of Technology Costin Carabaş, Nicolae Țăpuş	PDF 510-519
Individuals' Behavioural Intention to Adopt Internet Banking System in Bangladesh- An Approach to Extend Technology Acceptance Model Md. Afsarul Islam, Md Imran Ahmed	PDF 520-532
Dynamics of the Universe and the Growth of Structures: Dark side of Special Relativity, Curvature and Space-Time Pathma Abhayapanie Liyanage	PDF 533-571
Impact Of Playing Video Games On The Social Behavior And Academic Performance Of Medical Student In Taif City Abdulrahman Abdullah Almalki, Hind Mohammed Aldajani	PDF 572-585
Nanotechnology in Diagnosis and Treatment of Diabetes Mellitus: Review Maged Naser, Mohamed M.Nasr, Lamia H. Shehata Lamia H. Shehata	PDF 586-596
Subsurface Interpretation Based on Resistivity Data: A Case Study in Cepoko Village, Indonesia Ana Alina, Agus Setyawan, Dwiyanto J Suprpto, Rahmat Gernowo, Jatmiko E Suseno	PDF 597-602
Componentes y Subindicadores de Desarrollo Humano en México: Su Relación Con El PIB Real IMELDA ORTIZ MEDINA, MARLEN HERNÁNDEZ ORTIZ, JORGE MARTINEZ PÉREZ	PDF 603-610
What it Means to Be a New Keynesian Economist Özlen Hiç	PDF 611-619
CDM Theory, The Constituents Of The Universe And The Growth Of Structures: A Review Pathma Abhayapanie Liyanage	PDF 620-644
Coordination Chemistry of Vanadium Aquo Complex Ions in Oxidation States +II, +III, +IV, and +V: A Hybrid-Functional DFT Study Anant Babu Marahatta	PDF 645-661

- [Integración De Sistema De Automóvil Autónomo En Un Sistema Embebido](#) [PDF](#)
Luis Enrique Torres Beltran, Jorge Esparza Cortés, Luis Enrique Torres Beltrán, Hamurabi Gamboa Rosales 662-672
- [Evaluating The Policy Of Regional Tax Implementation On Swiftlet Nest Industry In The District Of Pasangkayu](#) [PDF](#)
Syahrir Syahrir, Mahfudz Mahfudz, Muhammad Nawawi, Awad Soulisa 673-681
- [The Effect Of Problem Solving Model Towards Students' Academic Ability-Based Argumentation Ability In Additive And Addictive Substance Materials At SMPN 18 Padang](#) [PDF](#)
Mutia Sari, Heffi Alberida, Abdul Razak Abdul Razak, Syamsurizal Syamsurizal 682-687
- [Relative Efficiency of Major Cities in Nepal](#) [PDF](#)
Govinda Tamang, Hem Raj Lamichhane, Nan Zhu 688-695

What it Means to Be a New Keynesian Economist

Assoc. Prof. Dr. Özlen Hiç BİROL

Istanbul University



Abstract – During the decade ‘80s economic policies began to be pursued that were in line with New Classical and particularly Monetarist theory both in the USA and Europe by conservative governments that had come to power. It was based on the assumption that the economy would automatically come to full-employment equilibrium, or using the concept first introduced by Friedman, at the point of natural rate of unemployment (nru). To achieve price stability along with automatic natural-rate-of-unemployment equilibrium, therefore, Keynesian policies of raising aggregate demand, including monetary expansion had to be discarded, and Monetarist tight money policy implemented instead. But the proposition of automatic natural-rate-of-unemployment equilibrium claimed by both New Classicals and Monetarists did not materialize; unemployment persisted and even increased during the ‘80s. The failure of New Classical and Monetarist policies made Keynesianism mainstream once again in the academic circles and this movement was called “Counter Counter-Revolution” (Blinder 1988, Mankiw, 1990).

The New Keynesians, who accepted the Keynesian unemployment (un-N) proposition and also accepted the criticism of the New Classicals that Keynesian macroeconomics lacked microeconomic foundations, tried to lay down the micro foundations for Keynes, but not by accepting perfect competition and Walrasian equilibrium but by pointing out to diverse reasons of “imperfect competition”, “inflexibility of wages and prices” and “lack of coordination between markets”. The pioneers of the New Keynesian Economics which emerged in the USA in the beginning of ‘80s are Alan S. Blinder, N. Gregory Mankiw, John Taylor, and David Romer.

Keywords – New Keynesian Economics, Keynesian Economics, Neo-Keynesian Economics, Post-Keynesian Economics,

I. INTRODUCTION: THE RISE OF KEYNESIANISM AS A REACTION AGAINST NEW CLASSICAL SCHOOL IN THE ‘80s

In the previous article on New Classicals we had studied the major factors that played a role in the demise of Keynesianism and the rise of the New Classicals School. This account was based mostly on Alan Blinder “The Fall and Rise of Keynesian Economics”. Again, according to A. Blinder, the rise or re-rise of Keynesian Economics during the years 80’s and on can be explained mainly by the factors below.

Firstly, as it should be remembered, the New Classicals School or paradigm had the emphasis on theoretical purity at the possible expense of empirical validity. It had become widespread during the years ‘70s of deep and long recessions. The New Classicals Economics declined policy recommendations and depended on the flexibility of wages and prices to pull the economies out of recession. Thus, empirical evidence was against the New Classical School. But the recessions were deep persistent. Again, in the years ‘80s we witnessed the Reagan-Volcker (FED chairman) tight monetary policy which had decreased inflation at the expense of a very high unemployment. This, too, could not be well-explained by the New Classicals theory, but could easily be

explained by the old-fashioned Keynesian theory. Similarly, depressions during the '80s in European countries could not be explained also by the New Classical theory but by the Keynesian theory. Thus, in all the empirical evidence during both the '70s and the '80s was against the New Classical paradigm but in line with the Keynesian theory and political recommendations (Here, of mean, they did not pursue Keynesian recommendations and thus received adverse results).

Another blow to the New Classical theory was the Barro's argument that debt-financial tax-reductions should have no real or nominal effects, because rational agents correctly perceiving their future tax liabilities would act to offset them. Thus, the only result would be a rise in private savings to offset the government dissaving. But econometric studies did not confirm Barro's argument. Here, again, the New Classical theory failed in giving policy recommendation and representing the actual events.

The European depression should be noted here as another a third event that run counter to the New Classical paradigm. The European depression was deep and long. The New Classical economists had, according to A. Blinder, no explanation to offer. In contrast, the Keynesian explanation of the European depression was straightforward. According to the Keynesian explanation, European governments and the Central Banks had decided to fight the inflation by highly restrictive monetary and fiscal policies, thus resulting in the deep and long recessions.

As the fourth factor, it should be emphasized here that the New Classical attack on the Phillips Curve was also very important. Both Lucas and T. Sargent had argued that during the '70s, the Phillips Curve as incorporated in the Keynesian System had gone thus invalidating the Keynesian theory. But the later econometric studies including that of Robert J. Gordon's proved that during those years had only witnessed upwards shifts of the Phillips Curve –because of cost inflation or supply rigidities due to energy shock-, thus, the Phillips Curve was still alive.

So, the upshot is that, although the New Classical theory was consistent and pure, it had little empirical validity. This, in contrast, to the Keynesian theory which was theoretically inadequate in the sense that it lacked microeconomic foundations but gave accurate empirical results. Hence, the New Keynesians did not simply go back to the old Keynesian theory but instead tried to establish consistent microeconomic foundations for the Keynesian theory. It should be remembered that the New Classical had based their macroeconomic analysis on the premises of perfect competition and Walrasian general equilibrium. This price and wage flexibility should have resulted in automatic equilibrium at the natural rate of unemployment (nru). Instead, New Keynesians in establishing microeconomic foundations dwelled mostly on imperfect competition and cases that has no relation with perfect competition and full price- and wage-flexibility. In doing so, the New Keynesians did actually establish microeconomic foundations for the Keynesian macroeconomic analysis and the Keynesian macroeconomic result of less-than-full-employment equilibrium due to lack of effective demand, but this, in fact, stemmed chiefly because of market imperfections -such as sticky prices, staggering wages and prices, lack of coordination between markets, menu costs, etc. This means to say that the New Keynesians are on the way to make the Keynesian macroeconomic theory consistent with the microeconomic theory, or in other words, they will the micro foundations for macro theory, but they will in future possibly change the microeconomic analysis which gives prominence to perfect competition to a microeconomic analysis which gives preponderance to imperfections. This is why the New Keynesians often deal at great length with models of imperfect competition, price and wage rigidities and less emphasis is given on overall macro analysis because the understanding is that once they establish micro foundations based on imperfect competition, the Keynesian macroeconomic results would follow suit. Hence, unlike the earlier Keynesians, most of the New Keynesians deal with micro foundation and in doing so, many New Keynesians accept the Rational Expectations assumption (RE) as well. It should be emphasized, here, that as models built by New Keynesians show the major assumption that gives equilibrium at nru is not RE, but the full flexibility of wages and prices. So, by accepting the RE assumption, understandably, New Keynesians thus avoid one line of attack that would come from New Classical, but still retain their basic conclusion of Keynesian unemployment due to lack of effective demand.

It should also be mentioned here that some New Keynesians accept nru and the very long-run inclination of the economy to settle at nru except that since the time taken would be very long, they would advise Keynesian policies to fight the unemployment. Some New Keynesians, on the other hand, refute the idea that the economy would somehow come to equilibrium at nru. Instead, they argue that the economy would show tendencies to stay at high or low employment levels once these are actually attained. This is called Hysteresis. Hysteresis is more in line and is in fact more consistent with the Keynesian theory compared to the conception that the economy would in the very long-run evolve towards the nru. The nru fits with consistency to Monetarism and to the New Classical School and is not too Keynesian. Again, although many New Classical accept RE since it would have no effect reaching the Keynesian condition of less-than-full-employment, this assumption was explicitly rejected by Keynes himself because Keynes

insisted that we lived in a world of “uncertainty” in which predictions of the future from past data was simply impossible. In contrast, RE assumes full access to data, past data and cross-sectional data by economic agents, a correct statistical analysis of this data and extrapolation of the future course of events, at least in terms of Bayesian probabilities.

It should also be noted that when Keynes wrote his book in 1936 the microeconomic analysis was based on perfect competition and with some special cases of monopoly, duopoly and oligopoly. Chamberlin’s and Joan Robinson’s books on imperfect competition had just been published in 1934. Therefore, although being aware of the need for micro foundations, Keynes could not go deeply into the matter and at one point he stated that we would have unemployment due to lack of effective demand (in other words, savings-investment inconsistency) even though we might have perfect competition prevailing in the commodity markets. Likewise, for Keynes, as in his original book, if we threw aside labor unions and let the wages fall, we would still be unable to reach full-employment equilibrium because of the same reason. It should be noted that for New Keynesians, this is not quite so because perfect competition in all the commodities and labor markets would indeed lead to automatic perfect competition in all the markets and hence, there would never be Keynesian unemployment. The New Keynesians, therefore, dwell on the imperfect market conditions as microeconomic foundations of the Keynesian macroeconomics.

Another point here would be a comparison of New Keynesians which is mainly comprised of American economists who faced severe criticism from Monetarists and New Classicals, and the so-called Post-Keynesian economists who are mainly in the United Kingdom with only a few American economists having joined them. The Post-Keynesians refute RE and cling to the Keynesians assumption of uncertainty. They all also accept hysteresis, that is, they refute that the economy would ever come to equilibrium at nru . So, Post-Keynesians are more in line with the original or fundamental Keynesian teachings. Some of the more notable New Keynesians are Alan Blinder, John Taylor, Stanley Fisher, Gregory Mankiw, David Romer and others.

The fifth point which is contradictory to New Classical paradigm is the movement of wages. According to the New Classical paradigm we should have low wages leading to a high employment rate (say, nru) and high wages leading to low employment levels. That is, the wages should be contra-cyclical. Empirical observations, on the other hand, show that wages are pro-cyclical, that is, rather high during boom periods and rather low during troughs (i.e., high unemployment periods, including depression times). This empirical observation of the movement of wages is explainable more readily with the Keynesian macroeconomic system. At high levels of aggregate demand (AD), say, due to fiscal and/or monetary policies or otherwise due to an upward shift of the investment function due to technological progress, both output and employment as well as nominal prices and nominal wages would tend to rise. During troughs, that is, low levels of AD, on the other hand, although output and employment would fall down and similarly nominal wages and prices will also fall down, they will, however, fall down only slightly due to rigidities. Thus, we would get a movement of nominal wages which is more or less pro-cyclical, as is also empirically observed.

II. BASIC TENETS OF KEYNESIANISM

It should be interesting to dwell on the basic tenets of Keynesianism at this point. An explanation is offered by A. Blinder in his “The fall and Rise of Keynesianism”. Blinder first notes that, as a rule of thumb, economic liberals and interventionists were called Keynesians. Indeed, throughout the years 1936 up to ‘80s, Keynesians were generally economic liberals and interventionists while Classicals and New Classicals were on the side of *laissez-faire* and hence conservative. During the years ‘70s when Monetarism and in particular New Classical School was in vogue, Keynesianism was used as a pejorative to mean old-fashioned and wrong. However, according to A. Blinder, Keynesianism is a theory of AD and a theory or a macroeconomic system which concludes that the effects of changes in AD work on y and N rather than price rises and inflation. The first three tenets of Keynesian macroeconomics follow from this:

- First point AD is influenced by a host of private and public economic decisions and sometimes behave erratically. There are differences of opinion concerning the effects on AD of monetary versus fiscal policy. In the earlier days, Keynesians believed monetary policy was ineffective because of $-l_{cr} = \infty$ (that means liquidity trap) while fiscal policy was effective (i.e., raising (g) or lowering $t(y)$). Later on, we had the Monetarist argument that fiscal policy is powerless because demand for labor is very inelastic. While under these circumstances monetary policy was the effective policy in raising AD (hence, raising y and N , but only in the short-run as Friedman argued with his adjusted expectations).

Today, all Keynesians and Monetarist no believe that both fiscal and monetary policy will effect AD. In contrast, many New Classicals believe in debt-neutrality, that is, substitution of debt for taxes would have no effect on total AD (This means when g is increased it will create a budget deficit, but this budget deficit is financed by increased internal borrowing, and hence, this should

leave AD the same, except that as a component public savings that would decrease and private savings would increase). Keynesians, that is, New Keynesians disagree with this analysis, as, for instance had been put forth by Robert Barro, a New Classical.

- According to Keynesian theory, changes in AD would have their greatest impact on y and N and not on prices in the short-run and the short-run lasts long enough to worry about initially, Keynesians believed that both the IS-curve in the IS-LM analysis and the AD curve in the AD-AS representation of macro equilibrium were upward sloping and quite flat except then we reach exceedingly high levels of capacity utilization.

Later and following the Phillips Curve (P.C.) by Phillips and the interpretation of the P.C by Lipsey, this was discarded but the Keynesians still retained a negatively sloping LM and AD curves. Thus, we would definitely have some increase in prices, as well as y and N when AD rises. The Neo-Classicals and the Classicals, on the other hand, envisage a completely, inelastic AS curve against a negatively sloping AD curve. Thus, any increase in AD, say, due to monetary or fiscal policy, would only result in an increase in prices with no effect on y and N . For Neo-Classicals, y and N will stay put at full-employment equilibrium level and for New Classicals it would stay put at n_{ru} .

- Keynesians (this involves New Keynesians, as well) believe that the goods market and the labor market respond only sluggishly to shocks, i.e. changes. That is, nominal prices and wages do not move quickly to clear the markets.

In contrast, the New Classicals believe in the natural or automatic mechanism or servomechanism (automaticity of the economy, that is, whenever a shock occurs, say, there is a fall in AD) the price and wage flexibility would ensure an immediate return to the old equilibrium point of the real parameters. This as full downwards-flexibility of the wages and prices as is assumed under the conditions of perfect competitions and Walrasian equilibrium through the wage- and price-auctioneer.

The Monetarist view is in between. With Friedman's adjusted expectations, Monetarists believe that any change in AD would affect y and N as well as prices in the short-run, but in the long-run, the effect on y and N will be wiped out and only nominal prices and nominal wages will change in the long-run.

The next three tenets of Keynesianism are concerned directly with policy recommendations and in this sphere, Monetarists part company with Keynesians to a greater degree but would still be in between Keynesians and New Classicals.

- For a Keynesian, the actual equilibrium levels of N have no special claim to optimality because N is subject to the caprices of AD and also because markets clear only very gradually. Keynesians generally believe unemployment to be too high to bear from the social point of view but that is a value judgment. In the positive economics vain, they think un- N to be very high and volatile (variable), but rigorous theoretical justification for this view is hard to come by. Keynesians also believe that unemployment and long periods of recession or depression is not Pareto-optimal responses to unattractive technological opportunities but are simply economic maladies as also is summarized or implied in the term involuntary unemployment. On this point, Neo Classicals differ sharply with Keynesians and with Monetarists in between New Classicals, e.g., as formulated by T. Sargent, business fluctuations and depressions are Pareto optimal responses to unattractive technological opportunities.

- Many but not all New Keynesians advocate activist stabilization policies (government intervention and demand management ($AD \equiv dd$)) in order to reduce the amplitude of business cycles which they rank as the most important of economic problems. In this point, Monetarists join ranks with Neo Classicals, in doubting both the efficiency of stabilization policy and the wisdom of government in attempting to implement these policies. There are, however, a few numbers of New Keynesians (not Keynesians or Neo-Keynesians) who also doubt the efficiency of stabilization policies and the wisdom of government attempting such a policy. In contrast, New Classicals go even further and question whether the business cycles are a serious problem at all (e.g., Lucas, 1987), for a rebuttal of this position of Lucas we can refer to A. Blinder, 1987.

Many Keynesians believe that economic knowledge (access to data plus reliable econometric model building) is secure enough for the government to fine-tune the economy. Yet, many Keynesians now believe in more moderate goals of stabilization policy, namely, the information and model building in our hands may not be adequate for fine-tuning but is adequate for what we might call "coarse-tuning". Even the case of coarse-tuning is, according to these Keynesians is defensible and feasible and should be attempted, because although the targets or goals may not be attained in very precise terms we could still improve the economy.

There is also another factor why Keynesians advocate and are in favor of advising stabilization policies to the government because if they don't then no one else, i.e. neither Monetarists nor New Classicals, would come forth because their stabilization

policy advice is limited. Neo Classical would have no policy advice except laissez-faire; Monetarist would only advise a constant increase in money supply. Thus, others would come forth with most likely wrong policy recommendations, hence, advice and policy recommendations with full knowledge of coarse-tuning is better than refraining from policy recommendation because fine-tuning is impossible.

- On the question which is the more serious economic or social ill; unemployment or conquering inflation, even New Keynesians are divided while many New Keynesian following Keynes original position believe that combatting unemployment is more important than combatting inflation. There are now many New Keynesians who believe that combatting inflation is more important today than combatting unemployment. In particular, many Central Banks belong to this category. They believe that inflation is a more serious ill compared to unemployment, and they prefer to use monetary policy to combat inflation rather than fiscal policy.

It may then sound like Monetarists, but we should remember here to Litmus test. Monetarists simply believe in a policy of increasing the money supply at a constant rate. This policy, according to them, would eliminate business cycles and open the road for steady growth of the economy with price stability.

Keynesians who use monetary policy to combat inflation, on the other hand, would tighten money supply (i.e., $MS \downarrow$ or $\Delta MS \downarrow$) to fight inflationary tendencies and would loosen money supply in order to avoid a recession.

2.1. Positive Keynesians and Normative Keynesians

It should be noted here that the first three tenets above concern positive economics, that is, a matter of scientific judgment. Positive Keynesians lever both monetary and fiscal policy that would change AD would affect y and N , that is, they would have real effects and that prices and wages do not move rapidly enough to clear the markets. Normative Keynesians add value judgments and political judgments and advise that governments should implement stabilization policies to fight the more serious ill, unemployment even if fine-tuning is impossible and we can only have coarse-tuning.

In the positive fields, Monetarists come in between Keynesians and New Classical, that is, like New Keynesians, they believe both monetary and fiscal policies would affect y and N as well as prices at least in the short-run, not so the New Classical. In the normative field, however, Monetarists part company with Keynesians and come nearer to New Classical. New Classical merely advise laissez-faire, that is, no intervention at all by the government. According to Monetarists, on the other hand, the government should only content with raising money supply at a constant rate. Keynesians and New Keynesians are widely different because they advise active stabilization policies (both monetary and fiscal policies) to fight the more serious problem of unemployment and recession, but also to fight inflation if need arises.

2.2 Rational Expectations (RE) and Natural Rate of Unemployment (NRU)

We should now add to the distinction of Keynesianism two important topics, namely, RE and the NRU.

On RE, Keynes was very doubtful and definitely stressed that RE could not be a valid assumption. For Keynes, in so far as investments and production is concerned, entrepreneurs face uncertainty. This meant that future cannot be predicted by means of analyzing past-time series and cross-sectional series. In other words, history does not repeat itself. In contrast, New Classical in assuming, RE, believed that future can be predicted by the use of past data.

There would only be several probabilities involved which would give rise to risk, hence, risk is calculable. In Keynes, uncertainty means we cannot calculate future loss or profit accurately, hence, there is always the need to be "liquid". Many Keynesians including Neo-Keynesians are also doubtful about the RE assumption as a behavioral hypothesis, but many New Keynesians, on the other hand, are willing to accept it. The assumption of RE, however, is not crucial in leading us to the Keynesian conclusion of less-than-full-employment equilibrium due to lack of effective demand. This is because many New Keynesians constructed models in which they accepted the RE hypothesis but worked with sticky prices implying a refusal of perfect competition, Walrasian equilibrium on Walrasian auctioneer. The result was that these models still gave Keynesian unemployment and confirmed the possibility of raising y and N by Keynesian policy recommendations (for instance, Staley Fischer, 1977; John Taylor, 1980). Therefore, New Keynesians generally do not consider RE hypothesis as a crucial topic for debate with the New Classical, and seem ready to accept it. In other words, RE hypothesis is not central to the debate between New Classical and New

Keynesians. In contrast, for instance, following Keynes original ideas, Post-Keynesians, a group of economists in the UK, refute RE and instead work with the original Keynesian assumption of uncertainty.

The above concerned investment and production decisions with respect to predicting prices, however, along with traditional Classical and Keynes had also assumed that entrepreneurs have accurate price expectations while workers make systematic errors in predicting price increases in future always tending to underestimate it both in the SR and also in the LR. This is not accepted by the New Classical. New Classical like traditional (early) Classical assume within their RE hypothesis that workers, too, make accurate price expectations.

Of course, the New Classical in their formulation of RE go one step further concerning the predictions of all economic agents, namely they assume that all economic agents, including investors, producers, workers etc., can also predict government policies to be followed in future accurately, and hence, take the necessary steps in their decisions by taking account of these policies. This, according to New Classical, lead to the conclusion that any expected economic policy to be followed by the government is futile. Only the shock that is unexpected policies would have effect in future on real parameters. This, of course, contrasts sharply, not only with Keynesians, but also Monetarists as well. Therefore, for New Keynesians who are willing to accept the RE, this last assumption of the New Classical concerning future government policies should not quite be acceptable.

Predicting future from past data implying that history repeats itself is termed “ergodicity”. If all the agents are assumed to be able to calculate future with full information the accent (emphasis) being on all economic agents, this is called “ubiquity”. Calculation of risk of production and investment can be achieved by means of “Bayesian probabilities”. When we can predict future based on past observations, it means producers and investors face only “risk” and not Keynesian “uncertainty”.

2.3 NRU and Hysteresis

Before the years ‘70s Keynesians believed that the P.C. was negatively sloped even in the long-run (LR). But this was rejected by Monetarist Friedman in 1968 as well as by Edmund Phelps, a Keynesian, again in 1969. Another Keynesian econometrician Robert Gordon also rejected the negatively sloped LR P.C. in 1972. As a result, a P.C. vertical in the LR became an integral part of Neo Keynesian Economics as well. Thus, the nru did not play any role in the arguments between these different schools during 1972-1985. The nru was defined by Friedman with a vague reference to Walrasian equilibrium and was defined as that rate of unemployment which, if increased, would give rise to price increases. An old Keynesian, Robert Solow, who should probably be turned Neo Classical Synthesis-Keynesian or Neo-Keynesian was very doubtful about this definition and the fact that it was not theoretically rigorous enough.

The nru implies that in the LR the economy would tend to come to this equilibrium point. This is the exact position of Neo Classical. They assume the economy would do so immediately.

Monetarists and Friedman, on the other hand, with their adjusted expectations hypothesis believed that the economy would come to nru in the next period, we might call it the LR, but it is not LR, it is the next period really).

New Keynesians believe that the economy would come by itself to nru at a very LR, hence, they advocate Keynesian policies to combat unemployment.

Still more recently and since 1985, some New Keynesians challenged the assumption that the economy would tend to come to equilibrium at nru. Their assumption is called “hysteresis”. Hysteresis is a word derived from physics. It means that an electrical field would have a center but if after a shock, there is a movement away from this center, we shall not return to the old center. Likewise, in economics, an economy may have nru, but if there is a movement away from this nru point, then in the economy, there would arise such forces that it will not return to the old nru position. If we look at Keynes from this point of view, obviously, he has, implicitly accepted hysteresis, because although such a center does not exist and full-employment equilibrium is no such center at least according to Keynes, we can implement economic policies and change the level of employment and stay there unless we change this point by further economic policies.

Now, New Keynesians start out in their analysis accepting nru as the natural center of the economy but point out that when we move away from this point there would arise factors that would tend to keep the equilibrium at the newly reached point. A. Blinder calls these models “Super Keynesian” Models. It should be noted here that following Keynes more closely, all the British and American Post-Keynesians accept the Hysteresis Assumption generally.

One factor explaining hysteresis is human capital (HK). Suppose that the economy is at n and y and N has been raised by means of monetary and/or fiscal policies. The added employed people will, thereby, gain skills and become productive. Thus, this would open the way for a higher level of y and N in future, and we would not go back to the old n . Conversely, suppose during a depression, unemployment increased, and we fell below the n . The added unemployed people will short be losing their skills and productivity and hence, in future, both GNP and N , i.e., the new n level will fall compared to the initial n point. In fact, if unemployment continues for a long time, some of the unemployed would tend to quit even searching for work.

Still another reason given for explains hysteresis is called the “Outsider-Insider” Relations. Here, we suppose that if unemployment increases, then these un-employed workers will quit their union-membership thus, from the point of view of unions they will become “outsiders” and the labor union will not be much concerned about their welfare and their employment possibilities. In contrast, those who are still employed, and union-members are termed “insiders”. And it is supposed that the union would be more concerned about raising the welfare of the insiders. This simply means that despite the presence of increased unemployment, the union will not be much concerned about keeping the nominal and real wage relatively low in order to have these people get employed. Instead, the labor union would set a relatively high nominal and real wage that would still keep the presently employed workers as employed but have them get a higher wage. Thus, unemployment will persist, and we shall no return to the n which implies a smaller rate of unemployment.

III. NEW THEORETICAL FOUNDATIONS FOR NEW KEYNESIAN ECONOMICS

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. Different New Keynesians have come up will different models that lead to the conclusion of Keynesian unemployment. 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:

- 1- Costly Price Adjustment (this includes the model offered by G. Mankiw on small Menu Costs and large business cycles).
- 2- 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).
- 3- 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”).
- 4- Coordination Failures (including John Bryant “A Simple Rational Expectations Keynes-type Model”).
- 5- 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”).
- 6- 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.
- 7- The Goods Market (this includes “Price Rigidities and Market Structure” by J.E. Stiglitz).

A close 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

IV. 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. Despite the fact that 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.

REFERENCES

- [1] Akerlof and Yellen, "A Near-Rational Model of the Business Cycles with Wage and Price Inertia," QJE, No. 100 supplement, 1985.
- [2] Akerlof and Yellen, *Efficiency Wage Models of the Labor Market*, Cambridge: Cambridge University Press, 1986.
- [3] Akerlof, "Gift Exchange and Efficiency Wage Theory: Four Views," AER, No. 74, May 1984.
- [4] Azariadis and Stiglitz, "Implicit Contracts and Fixed Price Equilibria," QJE, No. 98 supplement, Oct. 1983.
- [5] Ball and Romer, "Are Prices Too Sticky," QJE, No. 104, Aug. 1989.
- [6] Ball and Romer, "Real Rigidities and the Non-Neutrality of Money", *Review of Economic Studies*, No. 57, April 1990.
- [7] Ball, Mankiw and Romer, "The New Keynesian Economics and the Output-Inflation Trade-Off", *Brookings Papers on Economic Activity*, No.1, 1988.
- [8] Barro and King, "Time-Separable Preferences and Inter-Temporal Substitution Models of Business Cycles," QJE, Nov. 1984.
- [9] Barro, *Money Expectations and Business Cycles: Essays in Macroeconomics*. Academic Press, 1981.
- [10] Blanchard and Kiyotaki, "Monopolistic Competition and the Effects of Aggregate Demand," AER, Vol. 77, No. 4, Sept. 1987.
- [11] Blanchard and Summers, "Hysteresis and the European Unemployment", NBER, *Macroeconomics Annual*, 1986.
- [12] Blanchard, "Price Asynchronization and Price-Level Inertia," *Inflation, Debt, and Indexation*, Rudiger Dornbusch, Mario Henrique Simonsen ed., Cambridge: The MIT Press, 1983.
- [13] Blinder, "Retail Inventory Behavior and Business Fluctuations," *Brookings Papers on Economic Activity*, No. 2, 1981.
- [14] Blinder, "The Fall and Rise of Keynesian Economics", *Economics Record*, Vol. 64, No.187, Dec. 1988.
- [15] Bruce Greenwald, Stiglitz, "Keynesian, New Keynesian and New Classical Economics," *Oxford Economics Papers*, No. 39, 1987.
- [16] Caplin and Spulber, "Menu Costs and the Neutrality of Money", QJE, 102, Nov. 1987.
- [17] Carlin and Soskice, "Medium-Run Keynesianism: Hysteresis and Capital Scrapping," P. Davidson, J.A. Kregel ed., *Macroeconomic Problems and Policies*, Aldershot, Hants: Edward Elgar Publishing Ltd., 1989.
- [18] Coddington, "Keynesian Economics: The Search for First Principles", JEL, Dec. 1976.
- [19] Cooper and John, "Coordinating Coordination Failures in Keynesian Models," QJE, Vol. 100, No. 3, Aug. 1988.
- [20] Diamond, "Aggregate Demand Management in Search Equilibrium," JPE, Vol. 90, No. 5, Oct. 1982.

- [21] Fisher, "Long-Term Contracts, Rational Expectations and the Optimal Money Supply Rule", *JPE*, Vol. 85, No.1, Feb. 1977.
- [22] Gordon, "What is New Keynesian Economics," *JEL*, Vol. XXVIII, Sept. 1990.
- [23] Gordon, "Can Inflation of the 1970s Be Explained".
- [24] Gordon, "Understanding Inflation in the 1980s".
- [25] Hall, "Market Structure and Macroeconomic Fluctuations," *Brookings Papers on Economic Activity*, No. 2, 1986.
- [26] Hart, "A Model of Imperfect Competition with Keynesian Features," *QJE*, No. 97, Feb. 1982.
- [27] Kaldor, "The Irrelevance of Equilibrium Economics," *Economic Journal*, May 1975.
- [28] Katz, "Efficiency Wage Theories: A Partial Evaluation," *NBER Macroeconomics Annual*, 1986.
- [29] Leijonhufvud, *On Keynesian Economics and the Economics of Keynes: A Study in Monetary Policy*, Oxford Univ. Press, 1973.
- [30] Lindbeck and Snower, "Wage Setting, Unemployment and Insider-Outsider Relations", *AER*, No. 76, May 1987.
- [31] Lowell, "Tests of Rational Expectations Hypothesis," *AER*, March 1986.
- [32] Lucas and Rapping, "Real Wages, Employment and Inflation," *JPE*, Sept. 1969.
- [33] Lucas and Sargent, "After Keynesian Macroeconomics," *After the Phillips Curve: Persistence of High Inflation and High Unemployment*, Federal Reserve Bank of Boston Conference Series, No. 19, 1978.
- [34] Lucas, "Econometric Policy Evaluation: A Critique," Ed. by Brunner, Meltzer, *The Phillips Curve and the Labor Markets*, Carnegie-Rochester Conference Series on Public Policy, No. 1, Amsterdam, North-Holland, 1976.
- [35] Lucas, "Price Expectations and the Phillips Curve," *AER*, June 1970.
- [36] Lucas, *Models of Business Cycles*. Blackwell, 1987.
- [37] Mankiw "A Quick Refresher Course Macroeconomics", *JEL*, Vol. XXVIII, Dec. 1980.
- [38] Mankiw and Romer, "The New Keynesian Economics and the Output-Inflation Trade-Off" *Brookings Papers on Economics Activity*, No.1, 1988.
- [39] Mankiw and Romer, *New Keynesian Economics, Volume 1*, 5th. ed., Cambridge: The MIT Press, 1995.
- [40] Mankiw and Romer, *New Keynesian Economics, Volume 2*, 5th. ed., Cambridge: The MIT Press, 1995.
- [41] Mankiw, "Imperfect Competition and the Keynesian Cross," *Economics Letters*, No. 26, 1988.
- [42] Mankiw, "Small Menu Costs and Large Business Cycles: A Macroeconomic Model of Monopoly," *QJE*, Vol. 100, No. 2, May 1985.
- [43] Parkin, "The Output-Inflation Trade-off When Prices Are Costly to Change," *JPE*, No. 94, Feb. 1986.
- [44] Phelps and Taylor, "Stabilizing Powers of Monetary Policy with Rational Expectations," *JPE*, Vol. 85, No.1, Feb. 1977.
- [45] Roberts, Stocton and Struckmeyer, "An Evaluation of the Sources of Aggregate Price Rigidity," *Federal Reserve System, Division of Research and Statistics, Paper No. 99*, May 1989.
- [46] Sargent, "Estimation of Dynamic Labor Schedules under Rational Expectations".
- [47] Schleifer, "Implementation Cycles," *JPE*, No, 94, Dec. 1986, ss. 1163-1190.
- [48] Summers, "Relative Wages, Efficiency Wages and Keynesian Unemployment," *AER*, Vol. 78, No. 2, May 1988.
- [49] Taylor, "Aggregate Dynamics and Staggered Contracts".
- [50] Taylor, "Staggered Wage Setting in a Macro Model", *AER*, No. 69, May 1979.
- [51] Weiss, *Efficiency Wages: Model of Unemployment, Layoffs and Wage Dispersion*, Princeton: Princeton University Press, 1990.
- [52] Yellen, "Efficiency Wage Models of Unemployment", *AER*, No.74, May 1984.