Yıl: 2025 Cilt:10 Sayı:28 Year: 2025 Vol:10 No:28

İKTİSADİ İDARİ VE SİYASAL ARAŞTIRMALAR DERGİSİ

Journal of Economics Business and Political Researches

iktisad
jebupor
2016

Uluslararası e-Dergi / International e-Journal

e-ISSN: 2564-7466

İKTİSAD

JEBUPOR

İKTİSADİ İDARİ VE SİYASAL ARAŞTIRMALAR DERGİSİ

JOURNAL OF ECONOMICS BUSINESS AND POLITICAL RESEARCHES

Cilt: 10 ● Sayı: 28 ● Ekim 2025
Vol: 10 ● No: 28 ● October 2025

e-ISSN: 2564-7466

http://dergipark.org.tr/iktisad
e-posta: iktisaddergisi@gmail.com

İKTİSAD, uluslararası hakemli, uluslararası indeksli, açık erişimli bilimsel bir dergidir.

İKTİSADİ İDARİ VE SİYASAL ARAŞTIRMALAR DERGİSİ
JOURNAL OF ECONOMICS BUSINESS AND POLITICAL RESEARCHES

Dergi Ofis Adresi (Office Address)
Prof. Dr. H. Mustafa PAKSOY
Gaziantep Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, K:1, No:133
Şehitkamil / Gaziantep / Türkiye

Web: http://dergipark.org.tr/iktisad
E-mail: iktisaddergisi@gmail.com

İKTİSAD'ın Tarandığı İndeksler

TRDİZİN	Central and Eastern European Online Library
BASE Bielefeld Academic Search Engine	SOBIAD
CiteFactor Academic Scientific Journals	COSMOS IMPACT FACTOR
Scilit	EZB Electronic Journals Library
ZEITSCHRIFTEN DATENBANK	OpenAIRE
GENAMICS ...research from your desktop Genamics JournalSeek	ESJI Eurasian Scientific Journal Index www.ESJIndex.org
SIS Scientific Indexing Services	ROOTINDEXING JOURNAL ABSTRACTING AND INDEXING SERVICE
İNFOBASE INDEX	IJIFACTOR
SAJI JOURNAL INDEX	I2OR
EuroPub Directory of Academic and Scientific Journals	idealonline
DRJI	IPIndexing Indexing Portal

İktisadi İdari ve Siyasal Araştırmalar Dergisi yılda üç kez Şubat, Haziran ve Ekim aylarında yayınlanan uluslararası hakemli bir dergidir. Dergide yer alan yazılar kaynak gösterilmeksizin kısmen ya da tamamen iktibas edilemez.
Bu dergide yayınlanan çalışmaların bilim ve dil sorumluluğu yazarlarına aittir.
Dergimize gönderilen çalışmalar, alanında uzman iki ayrı hakem tarafından incelendikten sonra uygun görülenler yayınlanmaktadır.
Yazım kurallarına ilişkin bilgilere dergimizin ***web adresinde*** yer verilmiştir.

Journal of Economics Business and Political Researches is an international peer-reviewed journal which is published three times a year in February, June and October. The articles cannot be cited partly or entirely without showing resources.
The responsibility about scientific and grammatical issues is belong to authors.
The papers sent to the journal are reviewed by two referees and after their approval, they will be sent to edit before being published.
Writing & Publishing Policies can be found in the journal's ***website***.

Bu Sayının Hakemleri*

Prof. Dr. Ali Fuat GÖKÇE (Gaziantep Üniversitesi)	**Doç. Dr. Mustafa Alpin GÜLŞEN** (Alanya Alaaddin Keykubat Üniversitesi)
Prof. Dr. Alparslan UĞUR (Kırıkkale Üniversitesi)	**Doç. Dr. Nazlı ERSOY** (Osmaniye Korkut Ata Üniversitesi)
Prof. Dr. Ferit Serkan ÖNGEL (Gaziantep Üniversitesi)	**Doç. Dr. Onur DEMİREL** (Süleyman Demirel Üniversitesi)
Prof. Dr. H. Nejat BASIM (Başkent Üniversitesi)	**Doç. Dr. Saniye YILDIRIM ÖZMUTLU** (Tekirdağ Namık Kemal Üniversitesi)
Prof. Dr. Hüsnü KAPU (Kafkas Üniversitesi)	**Doç. Dr. Serap KALFAOĞLU** (Selçuk Üniversitesi)
Prof. Dr. Levent ÜRER (İstanbul Aydın Üniversitesi)	**Doç. Dr. Şerif CANBAY** (Düzce Üniversitesi)
Prof. Dr. Mehmet Merve ÖZAYDIN (Ankara Hacı Bayram Veli Üniversitesi)	**Doç. Dr. Tacinur AKÇA** (Ordu Üniversitesi)
Prof. Dr. Mehmet Metin DAM (Aydın Adnan Menderes Üniversitesi)	**Doç. Dr. Tülay DEMİRALAY** (Trakya Üniversitesi)
Prof. Dr. Mehmet ÖZÇALICI (Kilis 7 Aralık Üniversitesi)	**Dr. Öğr. Üyesi Abdullah Miraç BÜKEY** (İstanbul Üniversitesi)
Prof. Dr. Murat SEZGİN (Uşak Üniversitesi)	**Dr. Öğr. Üyesi Burak GÖKALP** (İstanbul Aydın Üniversitesi)
Prof. Dr. Mustafa KIRCA (Ordu Üniversitesi)	**Dr. Öğr. Üyesi Burcu SAVAŞ ÇELİK** (İstanbul Gelişim Üniversitesi)
Prof. Dr. Mustafa KOCAOĞLU (Necmettin Erbakan Üniversitesi)	**Dr. Öğr. Üyesi Coşkun SOYSAL** (Gaziantep Üniversitesi)
Prof. Dr. Özgür Emre KOÇ (Hitit Üniversitesi)	**Dr. Öğr. Üyesi Gökmen DURMUŞ** (Gaziantep Üniversitesi)
Prof. Dr. Selim YILDIRIM (Anadolu Üniversitesi)	**Dr. Öğr. Üyesi Hilal MOLA** (Atatürk Üniversitesi)
Prof. Dr. Süleyman Emre ÖZCAN (Manisa Celal Bayar Üniversitesi)	**Dr. Öğr. Üyesi Kürşad ÖZKAYNAR** (Sivas Cumhuriyet Üniversitesi)
Prof. Dr. Tolga ULUSOY (Kastamonu Üniversitesi)	**Dr. Öğr. Üyesi Lütfü SİZER** (Dicle Üniversitesi)
Prof. Dr. Yener PAZARCIK (Çanakkale Onsekiz Mart Üniversitesi)	**Dr. Öğr. Üyesi Ömer Faruk BÖLÜKBAŞI** (Recep Tayyip Erdoğan Üniversitesi)
Doç. Dr. Ali Osman BALKANLI (İstanbul Üniversitesi)	**Dr. Öğr. Üyesi Pınar KARAHAN DURSUN** (Mudanya Üniversitesi)
Doç. Dr. Asiye Ayben ÇELİK (Manisa Celal Bayar Üniversitesi)	**Dr. Öğr. Üyesi Rahman AYDIN** (Erzurum Teknik Üniversitesi)
Doç. Dr. Ayfer USTABAŞ (İstinye Üniversitesi)	**Dr. Öğr. Üyesi Salih Özgür SARICA** (Hitit Üniversitesi)
Doç. Dr. Ayşem SEZER ŞANLI (Erzincan Binali Yıldırım Üniversitesi)	**Dr. Öğr. Üyesi Seher Gülşah TOPUZ SEKMEN** (Eskişehir Osmangazi Üniversitesi)
Doç. Dr. Bayram KOCA (Kilis 7 Aralık Üniversitesi)	**Dr. Öğr. Üyesi Tarana AZIMOVA** (İstanbul Aydın Üniversitesi)
Doç. Dr. B. Dilek ÖZBEZEK (Gaziantep Üniversitesi)	**Dr. Öğr. Üyesi Tuba BIYIKBEYİ** (Kilis 7 Aralık Üniversitesi)
Doç. Dr. Burçhan SAKARYA (Başkent Üniversitesi)	**Dr. Öğr. Üyesi Uğur KAPLAN** (Doğus Üniversitesi)
Doç. Dr. Doğa BAŞER (Selçuk Üniversitesi)	**Dr. Öğr. Üyesi Uğur YILDIRIM** (Kırıkkale Üniversitesi)
Doç. Dr. Fatih CEYLAN (Uşak Üniversitesi)	**Dr. Öğr. Üyesi Zeynep BAYSAL** (OSTİM Teknik Üniversitesi)
Doç. Dr. Hande AKSÖZ YILMAZ (Kırşehir Ahi Evran Üniversitesi)	**Dr. Arya AKDENİZ** (Bağımsız Araştırmacı)
Doç. Dr. İsmail Hakkı KOFOĞLU (Avrasya Üniversitesi)	**Dr. Burhan DURGUN** (Dicle Üniversitesi)
Doç. Dr. Kaan İrfan ÖĞÜT (Bahçeşehir Üniversitesi)	**Dr. Ayşe AKBOZ CANER** (Bağımsız Araştırmacı)
Doç. Dr. Kamil TAŞKIN (Sakarya Üniversitesi)	**Dr. Gizem ÖZAYDIN** (İzmir Kâtip Çelebi Üniversitesi)
Doç. Dr. Kıymet YAVUZASLAN (Aydın Adnan Menderes Üniversitesi)	**Dr. Hakan Ömer TUNCA** (Atılım Üniversitesi)
Doç. Dr. Mehmet KIRLIOĞLU (Karabük Üniversitesi)	**Dr. Kübra ECER** (T.C. Cumhurbaşkanlığı İletişim Başkanlığı)
Doç. Dr. Mortaza OJAGHLOU (İstanbul Aydın Üniversitesi)	**Dr. Şifa ÖZKAN** (Doğuş Üniversitesi)
Doç. Dr. Murat GÜLER (Niğde Ömer Halisdemir Üniversitesi)	**Dr. Zafer DÖNMEZ** (Adıyaman Üniversitesi)

Bu sayıda birbirinden değerli **68 hakemimiz, İKTİSAD'a cömert bir şekilde zaman ve uzmanlıklarıyla katkıda bulundu.*
Kıymetli hakemlerimize, makale incelemeye ve değerlendirmeye gereken zamanı ve çabayı ayırdıkları ve çalışmanın kalitesini arttırmaya yardımcı tüm yorum ve önerileri için sonsuz teşekkürlerimizi sunarız.
Eğer sizler olmasaydınız, hakemli dergilerin yüksek standartlarını koruması imkânsız olurdu.
İKTİSAD, siz değerli hakemlerimizin cömert ve uzman katkıları sayesinde, bilimsellikten ödün vermeden, seçkin bir dergi olma yolunda ilerlemektedir.
Saygılarımızla…

İKTİSAD Editör Kurulu

Makaleler/Articles

Makaleler/Articles

Makaleler/Articles

Makaleler/Articles

Makaleler/Articles

Editörden

İktisat biliminin güçlü yanlarından biri, kendini eleştirebilme ve yenileyebilme kapasitesidir. Bu sayımızda, bu eleştirel geleneğin son derece çarpıcı bir örneğini sunmaktan büyük bir mutluluk duyuyoruz. Peter de Haan'ın "The Flaws of Neoclassical Economics" başlıklı yazısı, neoklasik iktisadın dayandığı temel varsayımları—rasyonalite, denge ve kurumsal tarafsızlık—titizlikle sorgularken, ekonominin gerçek yaşamla olan kopukluğunu derin bir entelektüel incelikle ele alıyor.

De Haan'ın yaklaşımı, yalnızca bir teorik eleştiri değil; aynı zamanda iktisat biliminin insan davranışını, kurumları ve belirsizlikleri anlamlandırma biçimine yönelik tarihsel bir yeniden değerlendirmedir. Yazar, iktisadın soyut modellerinin, insanın bilişsel sınırlılıkları ve sosyal bağlamları içinde yeniden düşünülmesi gerektiğini vurgulamaktadır. Bu bağlamda de Haan, 1970'lerde Kahneman ve Tversky'nin öncülük ettiği davranışsal devrimle başlayan dönüşümün, iktisadın temel kabullerini nasıl sarstığını hatırlatmaktadır.

Neoklasik teorinin sağladığı analitik gücü teslim ederken de Haan bizleri şu soruyla baş başa bırakıyor: "*Gerçek ekonomik yaşamı yakalayabilen bir iktisat bilimi mümkün mü*?" Bu yazı da iktisadi düşüncenin bugünkü sınırlarını yeniden tartışmak isteyen tüm okurlar için değerli bir davet niteliğindedir.

From the Editor

One of the greatest strengths of economics as a discipline lies in its capacity for self-critique and renewal. In this issue, we are pleased to feature a remarkable example of that tradition. Peter de Haan's essay, "The Flaws of Neoclassical Economics," offers a thoughtful examination of the foundational assumptions of neoclassical theory -rationality, equilibrium, and institutional neutrality- while addressing, with remarkable clarity, the persistent gap between economic models and real economic life.

De Haan's work is not merely a theoretical critique; it is a historical reconsideration of how economics has sought to understand human behaviour, institutions, and uncertainty. He reminds us that the discipline's abstract models must be reinterpreted in light of the cognitive limitations and social contexts that shape human decisions. In doing so, he recalls the intellectual shift that began in the 1970s with the behavioural revolution led by Kahneman and Tversky a turning point that challenged the very foundations of economic thought.

While acknowledging the analytical value of the neoclassical framework, de Haan ultimately asks a timeless question: "*Is an economics that truly captures real economic life possible?*" His essay stands as a compelling invitation to rethink the boundaries of contemporary economic science.

Dr. Elif KAYA

On behalf of İKTİSAD Editorial Board

The Flaws of Neoclassical Economics

Peter de HAAN*

Neoclassical economics provides valuable analytical tools which to this day are being used in teaching economics and explaining the functioning of economies. However, foundational assumptions about, e.g., rationality, general equilibrium, and institutional neutrality fail to capture how real economies function. This paper concludes with where the economic science stands today in attempting to capture real economic life as much as possible.

Som fifty years ago something happened which broadened the way economics was understood. It happened in a small-town South-east of New York City: Princeton, more precisely: Princeton University. It was there that a professor in psychology, Daniel Kahneman ran into something which surprised him greatly; the assumptions applied by economists regarding human behaviour. This is how he told the story:

One day in the early 1970s, Amos Tversky handed me a mimeographed essay by a Swiss economist named Bruno Frey, which discussed the psychological assumptions of economic theory…. Bruno Frey barely recalls writing the piece, but I can still recite its first sentence:

> *'The agent of economic theory is rational, selfish, and his tastes do not change. I was astonished. My economist colleagues worked in the building next door, but I had not appreciated the profound difference between our intellectual worlds. To a psychologist, it is self-evident that people are neither fully rational nor completely selfish, and that their tastes are anything but stable…. Here was an opportunity for an interesting conversation across the boundaries of the disciplines. I did not anticipate that my career would be defined by that conversation'* (Kahneman, 2011).

Assumptions

Homo economicus is a key assumption of classical and neoclassical economics. Kahneman was not the first scholar to conclude that there was a gap between the assumed behaviour of homo economicus and how people in day-to-day life behave, which he playfully demonstrated in his 2011 bestseller Thinking, Fast and Slow.

Another important (neo)classical notion is laissez-faire: let the market run its course, unhindered by outside forces (such as government), and everything will be fine as economic equilibrium will be the result. Forty years before Kahneman presented his critique, Cambridge economist John Maynard Keynes argued that in real life there was neither such a thing as laissez-faire, nor that someone's private interest would benefit the public good, an important observation attributed to Adam Smith. Keynes (1931) observed:

> *"It is not true that individuals possess a prescriptive 'natural liberty' in their economic actions. …The world is not so governed from above that private and social interests always coincide…. Nor is it true that self-interest generally is enlightened; more often individuals acting separately to promote their own ends are too ignorant or too weak to attain even these. …. We cannot, therefore, settle on abstract grounds, but must handle on its merits in detail….. to determine what the State ought to take upon itself to direct by public wisdom, and what it ought to leave, with as little interference as possible, to individual exertion."*[1]

*The Netherlands Ministry of Foreign Affairs (Retired), The Hague, The Netherlands, peterdehaan65@yahoo.com

[1]Alfred Marshall is the author of Principles of Economics. In this celebrated classic he observed that the great founder of classical economics, Adam Smith, had given many instances in The Wealth of Nations of the ways in which self-interest

Keynes Revolutionized Economics

At the end of this quote, Keynes hinted at the role of the state in correcting market failures. In 1936, he elaborated the government's crucial role in overcoming massive market failures in his master piece The General Theory of Employment, Interest and Money, triggering the Keynesian Revolution. He analysed the economy, not from the traditional microeconomic point of view, but from an aggregate, macroeconomic vantage point. Keynes also questioned the classical rational behaviour assumption, arguing that economic behaviour is also inspired by 'animal spirts'. By triggering the Keynesian Revolution, Keynes dethroned neoclassical economics as the leading school of thought.[2]

The Comeback of Neoclassical Economics

Neoclassical economics was not defeated; it kept on evolving quietly under the radar. During the early 1970s, neoclassical economics experienced a resurgence. What happened was that Keynesians had not foreseen, nor prevented, stagflation - the toxic mix of high inflation combined with high unemployment. Keynesians had a strong belief in the Phillips Curve, which said that there was an inverse relation between inflation and unemployment: a bit of inflation would bring unemployment down. Keynesians could not explain why the Phillips Curve had lost its relevance.

Meanwhile, neoclassical economists, such as Milton Friedman, had been developing new ideas. Friedman understood what stagflation's problem was and offered solutions.

Friedman had this to say about the role of economists developing new ideas:

"Only a crisis -actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until politically impossible becomes politically inevitable" (Burns, 2023).[3]

In the course of the 1960s, he already explained that the real unemployment rate was kept lower than the natural rate of unemployment, an idea Friedman had borrowed from Edmund Phelps.[4] Friedman also argued that there was too much money in circulation, resulting in even more inflation.

Later, during the 1970s, the New Classical Economics school of thought gained prominence; promoted by, in particular, Robert Lucas and Thomas Sargent, taking neoclassical assumptions on board. In sum, Keynesianism was out, and neoclassical economics became the dominated school of thought.

New Institutional Economics

As of the 1980s, New Institutional Economics (NIE) exposed the shortcomings of neoclassical economics' assumptions. It also proposed a more realistic approach, away from abstract models, in explaining economic growth or stagnation. NIE is now an important new branch of the economic sciences.

---

may lead the individual trader to act injuriously to the community. Source: Principles of Economics (1977). London: MacMillan, 627. Smith steadily insisted on the frequent opposition that there is between private interests and the public good.

[2]Lorie Tarsis, a student of Keynes's at the time commented: And finally, what Keynes supplied was hope: hope that prosperity could be restored and maintained without the support of prison camps, executions and bestial interrogations. Remember that during the 1930s, fascism and communism were on the rise.

[3] Burns used Friedman's words as a motto of her book.

[4] Emeritus Professor in Economics, Edmund Phelps, provided the microeconomic foundation for the Keynesian model of unemployment. In his 1965 paper 'Phillips Curves, Expectation of Inflation and Optimal Unemployment Over Time', Phelps introduced the term natural rate of unemployment (Phelps, 2023).

Neoclassical assumptions were questioned once again. This time by Douglass North, the new institutional economist. His Institutions, Institutional Change and Economic Performance, captures in concise terms the relevance of institutions in the process of economic growth (North, 1990). From a historical perspective, institutions comprise the underlying determinant of sustained economic growth. Institutions, as North defined them, are the constraints that structure human interaction. These constraints can be formal (i.e., laws) and informal (such as norms, beliefs) ones. Together they define the incentive structure, embodied in institutions of societies which determine economic growth, or the lack of it.

North developed a more realistic theory of doing economics, in exposing neoclassical economics' shortcomings. He argued that neoclassical theory is frictionless, in which institutions don't exist. Neoclassicals maintain that development occurs through perfectly functioning markets. In such a situation, the costs of acquiring information and the costs involved in transactions don't exist - the efficient competitive solution of neoclassical economics obtains! Even though economic actors may initially have erroneous models, the informational feedback process will correct initially incorrect models, leading surviving market participants to the correct and efficient models. North concluded that in neoclassical economics institutions won't matter, nor would time. However, institution do matter and, in addition, market transactions take time and involve transaction costs.

North was instrumental in establishing an entirely new school of institutional economics, of which Daron Acemoglu is the most prominent contemporary representative. Together with James Robinson he wrote Why Nations Fail (Acemoglu and Robinson, 2012); like North before them, both were awarded last year's Nobel Prize in Economics. Let me briefly tell you what Acemoglu and Robinson propose.

Acemoglu and Robinson sought to determine whether economic development would encourage liberalism. Based on an extensive historical analysis of growth trajectories of many countries, they identified two types of institutions: inclusive and extractive ones. Inclusive institutions promote prosperity, while extractive institutions (as the term implies) frustrate growth since the economic gains of growth are only shared by a small group that exploits others. Inclusive institutions encourage investment, while extractive ones discourage it. The authors also found, and this is important, that richer economies developed liberal democratic reforms.

What laid behind these insights? They found that, inspired by the mortality rate, countries experiencing a high mortality rate (such as those plagued by deadly tropical diseases), the colonial powers exploited native labour. This happened in many Sub-Saharan African countries and in many Latin American countries. Countries registering low mortality rates, such as in English-speaking offshoots (i.e., America, Canada, Australia and New Zealand), attracted European settles providing them with the opportunity to reap the fruits of their labour, thanks to the protection of private property and the development of free markets (both important institutions, first developed in England). What also happened, as mentioned before, is that more prosperous economies have instituted liberal democratic reforms.

Acemoglu and Robinson also tackled the question why some countries developed poor institutions. They observe that in a highly unequal society the poor could threaten revolution. Any commitment by the elites to redistribute wealth in response was not credible; they could always change their mind when the threat disappeared. As a result, unequal states were prone to instability. Checks and balances represented a response to this commitment: if elites were restrained, their promises to redistribute would be taken seriously and any revolutionary threat would be forestalled. This is why European states expanded the democratic franchise in the early 19th century.

In sum, Acemoglu and Robinson present an impressive and persuasive model, based upon historical developments They moved development economics away from abstract growth models.

Neoclassical Economics Remained Unshaken

Undeterred by the development of these new insights in economics, neoclassical economists carried on, this time under the name of New Classical school economists. I already mentioned Economics Nobel Laureates Robert Lucas and Thomas Sargent. They developed the rational expectations model. What is it about?

It can be best described as a consistent application of the hypothesis that rational individuals and firms behave in situations of change, with uncertainty about the future, imperfect information and costly information gathering. This does not imply that all agents have the same information, or that all agents know the true economic model; it simply means that agents are forward-looking and adjust their behaviour in response to anticipated future events.

Microeconomic Foundation for Macroeconomics

People and firms make rational predictions and decisions by considering the economic environment, market conditions, and their own experiences, thereby strengthening the case for macro models to be based on microeconomics. In other words, New Classicals lifted microeconomic notions to the level of macroeconomics. They express faith in the stability of the market, and, not least important, in general equilibrium. They are suspicious of government intervention. They advocate predictable government policy rules, while Neo-Keynesians argue, not surprisingly, that market failures of a macroeconomic nature occur, and that the government has to do something about them.

Given Lucas's belief in market clearing equilibrium, it is no surprise that in his 2003 Presidential Address to the American Economic Association, he said the following:

> *"Macroeconomics was born as a distinct field in the 1940s, as a part of the intellectual response to the Great Depression. The term then referred to the body of knowledge and expertise we hoped would prevent the recurrence of that economic disaster. My thesis in this lecture is that macroeconomics in this original sense has succeeded: its central problem of depression-prevention has been solved, for all practical purposes, and has in fact been solved for many decades"* (Quote from Krugman, 2013).

Only four years later, the financial crisis broke out followed by the Great Recession.

What New Classicals introduced was accepted by the profession, in particular by younger economists at the time. Early critics included the not-so-young Economics Nobel laureate and Neo-Keynesian, Robert Solow. In an interview he observed that the habit of labelling New Classical Economics as the rational expectations school is a misleading habit (Klamer, 1984). All of the propositions associated with that school of thought come from the hypothesis of market clearing, and not from the rational expectations hypothesis. In addition, Solow observed that it is hard to believe that common economic agents strictly behave in a rational manner. Analytically speaking, New Classical Economics is attractive, but weak in its assumptions, Solow said. The assumptions they apply in their market-clearing-equilibrium, are simply unrealistic. Solow admitted that his own work applies different assumptions, and discussing them with New Classicals proved to be difficult.[5]

Not just Solow was critical, Edmund Phelps, for example, also does not believe that individuals behave as Lucas and Sargent argued. Phelps had been developing theories in which expectations play a crucial part. He maintains that 'a nation's economy is not generally on an equilibrium path characterized by correct (at least unbiased) expectations and, barring new developments, it is in the process of learning the correct expectations as the economy evolves' (Phelps, 2023: 95). He concludes: 'As I saw it, the New Classicals, with their adherence to 'rational expectations', showed they had little or no sense of a modern economy – an economy that, at its core, is driven by the

[5]Solow quoted the economist Frank Ramsey who compared such a discussion with the following conversation: 'I went to Grantchester today.' 'That is funny, I didn't.'

judgement, intuitions, and imagination of a modern people' (Phelps, 2023: 96-97). Phelps is implicitly referring to what the psychologist Daniel Kahneman would call Humans, and to Keynes's animal spirits.

Enter Behavioural Notions

In 2011, Daniel Kahneman's published Thinking, Fast and Slow. This fascinating book contains an elaborate critique of the rational agent model.[6]

He presents Econs and Humans, underscoring that 'Humans' don't necessarily act rationally. Moreover, they have limited information, and are not consistent and logical in their decisions. Kahneman observed that the term Econs is applied by economists, such as Lucas, while the term Humans is used by psychologists. Humans are 'System 1' types (fast, intuitive and emotional). Kahneman also introduces the' System 2' type, which is slower, more deliberative, and more logical. Humans are real people - we recognize their behaviour, not least our own. Econs pretend to act along System 2 lines, but – and economists overlook this - they are distracted by all kinds of phenomena, such as how an issue is being presented, as explained below.

Kahneman argued that every significant choice we make in life comes with some uncertainty. This is why students of decision-making hope that some of the lessons learned in a model situation apply to more interesting everyday problems. However, Kahneman added, tongue-in-cheek, that decision theorists study simple gambles, that other decision theorists had developed.

This field of research has a theory, called expected utility theory, which provided the foundation of the rational-agent model and remains, to this day, the most important theory in the social sciences. For example, economists adopted expected utility theory in a dual role: (i) as a logic that prescribes how decisions should be made, and (ii) as a description of how Econs make choices.

Regarding decision-making, Kahneman gave the following example. The way in which a question is formulated influences the outcome of an investigation about willingness to donate organs. Research in Europe revealed that high-donation countries applied an opt-out form, while low-contribution countries had an opt-in form; i.e., you had to check a box to become a donor. Kahneman concluded that the low-contribution outcome was best explained by the laziness of System 2. The choice was controlled by an utterly inconsequential feature (i.e., checking a box) of the situation. This is just one point against the rational-agent theory.

Another assumption is that humans have consistent preferences. However, we cannot trust our preferences to reflect our interests, even if based on personal experience, Kahneman argued. Tastes and decisions are shaped by memories, which can be wrong. Studies suggest that humans don't have consistent preferences and would know how to maximize them - another cornerstone of the rational-agent model. Kahneman found that there is an inconsistency built into the design of our minds. We want pain to be brief and pleasure to last longer. But our memory, which is a function of System 1, has evolved to represent the most intense moment of an episode of pain or pleasure and the feelings when the episode was at its end. In other words, memory is led by duration neglect and peak-end rule. The result is that a memory that neglects duration will not serve our preference for long pleasure and short pains.

Kahneman concluded that a theory (like the rational-agent model) worthy of its name asserts that certain events are impossible: they will not happen if the theory is true. When an 'impossible' event is observed (such as the 2007 financial crisis and subsequent Great Recession), the theory is falsified. Kahneman then sank the knife: 'Theories can survive for a long time after conclusive evidence falsifies them, and the rational agent model certainly survived the evidence we have seen, and much other evidence as well.' He concluded: 'A significant difference between believers in the

[6]Kahneman was awarded the Nobel Prize in Economics in 2002 for his work integrating psychological research into economics, particularly concerning human judgment and decision making under uncertain circumstances.

rational-agent model and the sceptics who question it is that the believers simply take it for granted that the formulation of a choice cannot determine preferences on significant problems. They will not even be interested in investigating the problem – and so we are often left with inferior outcomes' (Kahneman, 2011: 374).

Returning to Neoclassical Economics

One of neoclassical economics hero's is Friedrich Hayek. He compared the price system with a system of telecommunications. The market, reflecting prices obtaining, provides the information consumers and investors need to make informed decisions. Distortions of this system, for example caused by inflation or wage and price controls, give the wrong signals. In situations like these, prices no longer reflect the most efficient modes of production. This will result in resources being employed in inefficient and unproductive activities. But eventually, the market will eliminate the distortions and equilibrium is restored.

This is what the efficient market hypothesis says: financial markets would accurately reflect all available information. The rational expectations theory provided a foundation for the efficient market hypothesis, suggesting that individuals incorporate all relevant information into their expectations leading to efficient market outcomes.

The Grossman-Stiglitz Paradox

What Hayek presented sounds plausible, but is it? Joseph Stiglitz and Sanford Grossman disagree. Right from the start they wonder if competitive equilibrium is defined as a situation in which prices are such that all arbitrage profits are eliminated, is it possible that a competitive economy always be in equilibrium? Clearly not, is their response. In their paper, they introduce the Grossman-Stiglitz paradox. It states that perfectly informationally efficient markets are an impossibility since, if prices perfectly reflected available information, there would be no profit to gathering information, in which case there would be little reason to trade and markets would eventually collapse (Grossman et al., 1980).

Let us take the stock market. If stock prices at every moment reflected all of the available information about the economic outlook, and other factors pertinent to individual companies, investors wouldn't have any incentive to search out and process it. But if nobody processes information, stock prices won't reflect that information, and the market won't be efficient. Grossman and Stiglitz conclude that for the market to function effectively, there must be some level of inefficiency.

Hayek ignored market failures. Grossman and Stiglitz demonstrate that information is not fully revealed by market prices, comparing information with air: its adequate provision is a precondition for other things to take place. However, when this information is lacking, or is only partially available, Hayek's celebrated telecommunications system can't work. Insights in so-called bounded rationality, nuance the picture sketched by Grossman and Stiglitz.[7]

[7]Unlike the traditional economic assumption of perfect rationality, bounded rationality recognizes that people use simple rules of thumb to make decisions. The concept of bounded rationality was introduced by Herbert Simon. It highlights that decision-makers strive to make rational choices but are often limited by the information available to them and their cognitive processing abilities. Bounded rationality is particularly significant in behavioural economics, as it helps explain adaptive real-life decision-making processes that deviate from classical economic theories.

Why Neoclassical Economics is not Written off

Given neoclassicals' flaws, such as unrealistic assumptions about human behaviour, unrealistic assumptions about the functioning of markets, and neglect of institutional factors, one wonders why neoclassical economics is not written off altogether?

There are appealing reasons for its perseverance. One can think of the following ones:

First, the theory itself. It is an elegant and relatively simple one. Take this description: Neoclassical economics begins with the proposition that the economy is comprised of rational self-interested individuals (i.e., consumers and firms) who maximise their utility through voluntary exchanges in markets which, when free from external interferences, produce an efficient equilibrium. At first glance, this description is appealing. Economic actors operate sensibly, inspired by the notion that they are free to make decisions on how to spend their money. Let's face it, in economic matters people are fairly rational, and dropping simple assumptions would complicate economic modelmaking. Prices play a prominent part in an economic decision-making process: If the price of a good is too high, it won't be sold. If an investment is too risky, funds won't be devoted to it. When prices give the wrong signal, as Hayek argued, an automatic process ensues, eventually resulting in an efficient equilibrium.

And as Adam Smith wrote in many instances (but not in all): each private producer is not just contributing to his or her economic well-being but often also to the public good.

The government is responsible for ensuring that the market can function free of external influences. The government should also address market failures. The government itself is supposed to only undertake public tasks that individual market participants cannot undertake.

This model is not just simple, logical and elegant, it is also very useful for educational purposes in demonstrating students how homo economicus, and the economy at large, are supposed to function. Indeed, another strong point in favour of neoclassical economics.

Now, what about neoclassical economics' assumptions? This is what Milton Friedman wrote about assumptions in his famous *The Methodology of Positive Economics* (Friedman, 1953). He argued that theories should be evaluated not on the basis of the realism of their assumptions but exclusively on the basis of the accuracy of their predictions resulting from their hypotheses. This is what he argued: A hypothesis must be descriptively false in its assumptions; it takes account of none of the many attendant circumstances, since its very success shows these assumptions to be irrelevant for the phenomena to be explained.'

So, Friedman, like a magician, made assumptions disappear. Needless to say, Friedman's opinion was contested. His long-time opponent, Paul Samuelson objected to Friedman's claim about the irrelevance of assumptions. Samuelson retorted that based on the principles of logic, true assumptions can only produce true conclusions. But false assumptions can produce both true and false conclusions. Economics, Samuelson concluded, needed true conclusions.

Another strong point in favour of neoclassical economic is its emphasis on the central role of the market. After all, the market and the price system provide the incentives to invest, work hard, and reap the profits, all of which contribute to economic growth. There is simply no other economic system, than the one based upon neoclassical principles that register better economic results.

This message was persuasively communicated by associations composed of liberal-minded scientists, such as Hayek's-inspired Mont Pèrelin Society, and think-tanks - inspired by the philosophy of Friedman - receiving funds from donors with deep pockets, to spread the gospel of the market (and small government) among politicians - in particular Ronald Reagan and Margaret Thatcher at the time - the media, and opinion leaders. Surely, the market has its downsides – it can be unforgiving for those whose business went under and for workers who lost their jobs. However, this aspect received little attention from them. Redistribution policies neither constitute a prominent part in the neoclassical play book.

These persuasive selling points could not prevent what happened in the first decade of this century. Neoclassical economics' flaws - in its New Classical School guise - were embarrassingly exposed during the 2007-2008 financial crisis and the ensuing Great Recession. Markets failed spectacularly. It turned out that their models had little explanatory and predictive power. They could not simultaneously explain both the duration and magnitude of actual cycles. Lucas's statement that macroeconomics' central problem of depression-prevention had been solved, proved to be wrong. Corrective Keynesian actions had to be taken by the government to prevent economic disasters.

This is what then Chairman of the Fed, Alan Greenspan, confessed during an interrogation by members of the American House of Representatives. Greenspan said: I made a mistake in presuming that the self-interest of organisations, specifically banks, is such that they were best capable of protecting shareholders and equity in firms…I discovered a flaw in the model that I perceived is the critical functioning structure that defines how the world works. I had been going for 40 years with considerable evidence that it was working exceptionally well. Greenspan was apparently one of the believers in the way neoclassical economics works in practice.

Toward the Neoclassical Synthesis

In a New York Times column, Paul Krugman describes what he understands neoclassical economics to be: 'We imagine an economy consisting of rational self-interested players, and suppose that economic outcomes reflect a situation in which each player is doing the best he, or she, can, given the actions of all the other players. If nobody has market power, this comes down to the textbook picture of perfectly competitive markets with all the marginal whatever's equal' (Krugman, 2012). Krugman then observes that some economists, like Greenspan, really believe that life is like this, but they have a significant impact on our discourse.

Krugman then observes that the rest of us are well aware that this is just a metaphor. Nonetheless, most of what Krugman and his allies do is sort of neoclassical because they take, as Klugman calls it, the 'maximization-and-equilibrium world' as a starting point, which is then modified - but not too much in the direction of realism.

He explains why this dressed-down neoclassical approach is taken. It is simple, also realising that in the real-world people are fairly rational, and more or less self-interested. If one were to integrate qualifiers, this would complicate the model. So, keep it as simple as possible! Since introducing dynamics into a model is challenging, it is best, adds Krugman, to take as the end state of such a dynamic process an equilibrium, as this may reveal the researchers much of what they want to know.

Krugman also wonders what truly non-neoclassical economics would look like. It would involve, inspired by Kahneman, rejecting both the simplification of maximizing behaviour, going for full behavioural, as well as rejecting the simplification of equilibrium, as Solow had argued, while going for a dynamic story with no end state. Krugman also mentions agent-based economics, which relies on computing, while making simplified but unrealistic assumptions, like those of neoclassical economics.

So, he explains why neoclassical notions are not discarded. The qualifiers, as he calls them, fall into the domain of behavioural economists and other specialised fields, as they would complicate the model too much.

Conclusion

In the real economy, the government has a much larger role to play than the limited role prescribed by neoclassical economics. This conclusion is of course not new. Paul Samuelson developed the so-called neoclassical consensus. It recognises, like Keynes had done, the merits of the government's corrective role in the economy, not just in addressing booms, busts, price stickiness, and market failures, but also in promoting social justice and social stability.

During periods of economic stability, such as during the Great Moderation of the 1980s and 1990s, let the market run its course and keep government's involvement small. However, when things go wrong, the government must be called in to restore stability. The neoclassical paradigm did not foresee such a situation from happening. Neoclassicals could not sufficiently explain, nor predict, what happens in the real world.

This understanding triggered a renewed neoclassical synthesis, which forms the basis of mainstream economics today. In this synthesis, New Keynesians accepted the relevance of Friedman-inspired monetary policies and Lucas's rational expectations hypothesis, providing a microeconomic foundation for Keynesian economics. New Classical economists accepted the New Keynesian notion that for several reasons (e.g., stickiness) wages and prices do not move quickly to a long-term equilibrium.

The flaws of neoclassical economics also led to the emergence of new branches of the economic science, attempting to explain economic phenomena, while applying more realistic assumptions. It is unlikely, as Krugman suggests, that realism will ever be fully incorporated in economic models, simply because real world economies do not function along the lines of universal, predictable laws, such as those of physics. However, one should not exclude the possibility, propelled by advanced AI, that these new branches may produce instruments that can be incorporated into more realistic models.

References

Acemoglu, D., and Robinson, J. (2012). *Why nations fail; The origins of power, prosperity and poverty*. London: Profile Books.

Burns, J. (2023). *Milton Friedman; The last conservative*. New York: Farrar, Straus and Giroux.

Friedman, M. (1953). *The methodology of positive economics; Essays in positive economics*. Chicago: University of Chicago Press.

Grossman, S. J., and Stiglitz, J. E. (1980). On the impossibility of informationally efficient markets. *American Economic Review 70*(3), 393-408. https://www.jstor.org/stable/1805228

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.

Keynes, J. M. (1931) The end of Laissez Faire. In: *Essays in persuasion* (pp. 272-294). London: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-59072-8_21

Klamer, A. (1984). *The new classical macroeconomics; Conversations with new classical economists and their opponents*. Brighton: Wheatsheaf Books.

Krugman, P. (2012, August 28). Is economic growth going down the drain?. The New York Times. https://tinyurl.com/pfhtasfz

Krugman, P. (2013). *End this depression now*. New York: Norton & Company.

Marshall, A. (1977). Principles of economics. London: MacMillan and Co.

North, D. (1990). Institutions, institutional change and economic performance. Cambridge: Cambridge University Press.

Phelps, E. (2023). My journeys in economic theory. New York: Columbia University Press.