

Title	英文抄録
Sub Title	
Author	
Publisher	慶應義塾経済学会
Publication year	1969
Jtitle	三田学会雑誌 (Keio journal of economics). Vol.62, No.12 (1969. 12) ,p.1- 5
JaLC DOI	
Abstract	
Notes	
Genre	
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00234610-19691201-0083

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

来から自動車購入の消費者金融方程式については、可処分所得の効果がはっきりと測られているのに反して自動車保有台数と支払い額の中の割賦金の割合との間のコリニアリティのために思うような推定ができないという困難があったが、この問題は、今度の論文でも未解決のようである。

第三章の第3論文である D. T. Kresge の "Price and Output: A Modified approach" は重要である。もともと Brookings の 1965 年モデルは国民所得ベースの生産量と価格を I/O 表の附加価値ベースに変換するいわゆるコンバーターを実際に作ってみせた先駆的榮譽をになっている。1965 年モデルでは Klein, Shinkai の二人が自己相関法 (Auto Regressive Correlation) を用いて強行したのだが、Kresge はこの論文では、各期ごとに価格と数量のウェイトの consistency を保つために反復相関 (iterative correlation) の方法を採用している。イギリスの Stone 等が示した RAS 法と共に、この分析の方向は I/O 表の係数の補間の手続きを大きく進歩させるであろう。

第三章の所得分布分析の章では、P. Dhrymes が労働需要関数を測定している。従来の Brookings Model では線型の生産関数から導出した労働需要関数を計測していた。Dhrymes は、CES 生産関数から導びかれる労働需要関数をモデルの中に組み込む工夫を示している。ラグを持った投資が労働生産性に影響するように設定して、Brookings Model グループの大きな業績の一つである投資ラグとの関係が陽表的に扱えるようになった。

企業所得や財産所得をはじめとする非賃金所得は、従来の Brookings Model では暫定的に外生変数として扱っていた。この部分への接近を M. D. McCarthy が行なっている。特に企業所得の決定には現行税制度と減価償却法をモデルの中に正確に組み込む必要があって、それぞれ Arrow や Jorgenson の先駆的な研究があるのだが、McCarthy の論文によってこの分野の本格的な実証分析が開始されたとみてよい。

第四章は財政部門モデルの二つの追加研究を収録している。連邦政府や州政府の税収を決定する方程式群は前の Brookings Model でも重要な内生的政策変数の

役割を果たしていた。P. Taubman は従来の Model では統計的なフィットに頼っていた税収方程式を、現実の税制度をできるだけ忠実にコピーした、定義式に近い方程式系で説明しようとしている。勿論、依然として殆んど全部回帰式に頼っているが(そして中には随分低い相関係数を得ているものもあるが)、この試みは今後当然の方向とし受け容れられるであろう。

第五章は金融部門ブロックに関する二つの対称的な論文を収録している。E. de Leeuw の論文は従来 19 本の方程式からなっていたモデルの金融市場ブロックを改めて 6 本の方程式でまとめようとしている。Leeuw は単にモデルを縮小しようとしているのではなく金融市場の現象の抽象の方法の変更を提案しているのである。反対に S. H. Goldfeld は従来の Brookings Model の弱点であった企業部門の流動性需要の理論の部分を改良するために以前よりずっと詳細なモデルを指向している。

改良された Brookings Model は前述のように方程式の数が増えて、それだけ非線型の組み合わせも複雑になって行く傾向にある。第七章では L. R. Klein と G. Fromm が条件付きの大型の行列演算を中心に、この巨大なモデルの解法を論じ、A. L. Nagar が作製した計算プログラムを用いて推定を行なっている。このモデルを用いて、第七章 (Klein) で 1964 年の減税の効果を検討するなどのシミュレーションを行なっている。1964 年の減税は、それを行なわなかった場合に比べて約 100 億ドルほど GNP を増加させ 0.5 ポイントほど失業を減ずる効果を持ったと結論している。

経済モデルの性能とその背後に置かれている仮説の最終的な検証は、モデルの予測能力を通じて行なわれるという意味で、この巨大な実験の評価は、今後の予測能力を見守らなければ下せない。けれども、Brookings Model の大きな功績は、新古典派的な原理をできる限り修正してマクロモデルの中に組み込んで来た試みであり、またモデルの改良の作業が依然として続けられている点にある。ビッグ・サイエンスとしての経済モデル分析の共同研究作業の偉大な典型であるといつてよいであろう。

鳥居泰彦

The British Labour Movement and Industrial Relations in 1860's Centering Around the Establishment of the Trades Union Congress (1)

by Kanae Iida

The 1860's are generally called the "hibernating" period of labour movement. As was said by Friedrich Engels, they are probably the time when the spirit of the Owenism of 1830's and the Chartism of 1840's were entirely slipped from the people's mind, and the working class was picking with gratitude the bread crumbs falling from the bourgeois table of the Golden Victorian Age.

This depiction of the labour movement at that time conveys a partial truth, but it is certainly overlooking an important aspect of the labour movement when we remember that the 1860's in England and Europe were the time when some interrelated epoch-making events happened one after another, such as the International Exposition of London in 1862, the Polish struggle for independence in 1863, the International Workingmen's Association of 1864, that is, the grand inauguration convention of the First International in London. Enhancing the international spirit of solidarity to an unprecedented degree, these affairs proved very useful in the cause of labour-movement.

On the other side, the skilled artisans, led by the Junta, which had been formed by such persons of the national craft unions, as George Odger, Robert Applegarth, Edwin Coulson, Daniel Guile and William Allan, directed the labour movement controlling over labor market and effectively maintaining the high wage policy.

Surveying the labour movement of England like this, we recall the remark rightly said by Engels that the labour class of England was a "labour aristocracy".

The labour movement as described above embraced the all sorts of internal contradictions. For example, in spite of the fact that the labour movement should be treated as none but a *de facto* legal affair, not only the Trade Union Act was not enacted, but it was largely affected by the dictate of the so-called Master and Servant Act, and the labour disputes were carried under its restrictions.

As a result of the downfall of the Chartist Movement in 1848, the manhood suffrage was denied to labour. As late as 1867 it was granted, but it was limited only to the household suffrage.

Under such a limited condition of human right, the Trades Councils were set up all over the

country with the London Trades Council as their central organ, and further, as a pivotal body of these agencies, the establishment of a powerful Trade Union Congress was planned.

In order to accomplish this program for labour movement, it was essential that a troublesome process be gone through. Against the Junta's policy, that is, the principle of amalgamated societies, George Potter who stood by the traditional Chartism on the basis of the small scale construction workers unions, expressed his antagonism in his organ magazine *The Bee-Hive*. Because of this Potter's challenge, the unification of the trade union movements became very difficult to be realized.

This work aims at elucidating the English labour movement which is, nevertheless, steadily advancing as a whole toward the establishment of the Trades Union Congress in the face of all sorts of contradictions involved:

- (1) Preface. The Meaning of the Labour Movement in 1860's.
- (2) The Background for the Establishment of the Trade Union Congress.
- (3) The Development of the Internal Contradictions in the Labor Union Movement in '60's.

The Contradiction between Production and Consumption as Related to the Study of Crisis (1)

by Kiyoko Imura

K. Marx considers "the last cause" of all real crisis to lie in the contradiction between production and consumption; in his own words, "The last cause of all real crisis always remains the poverty and restricted consumption of the masses, as compared with the impulse of capitalist production to develop the productive forces as if only the absolute power of consumption of society were their limit."

We should know that this statement by Marx is referring merely to "the last cause" of crisis. It does not explain the inevitable breaking out of crisis in the industrial cycle.

The relationship under the capitalist regime as described above the developing tendency of production on one hand and the restriction of consumption on the other hand always existed. In spite of this contradictory relationship, the rapid expansion of production and even the demand over above the supply capacity would continue for a certain period of time, and by sudden at a

later period, the crisis would occur.

The series of the work, beginning with Article No. 1, aim at the elucidation of the above portrayed industrial process. It is essential, therefore, that any study of economic crisis, after having ascertained "the last cause" of crisis to be the contradiction between production and consumption, should try to clarify why and how the industrial cycle followed by a crisis occurs under the prevailing contradiction.

The Introductory Chapter of Article, No. 1, first investigates the contradiction between production and consumption under the capitalist regime, in other words, it inquires into "the last cause" of crisis, discussing the basic analysis by which the question of crisis should be analyzed.

Chapter I explains the structural relationship between production and consumption under the capitalist regime of production. Its Section 1, takes up the *Marx's Scheme of Reproduction*, and presents the points that have been successfully explained in terms of the structural relationship between production and consumption, and the problems that have not been clarified by it. (to be continued)

On the Nature of Geography

by Junjiro Takahashi

In the past decade geography has undergone a radical transformation of its purpose and scope, best described as the "mathematical or quantitative revolution." Various mathematical models have been developed and highly advanced quantitative techniques which involve multivariate analysis such as factor analysis have been introduced into the various field of geography. Given the broad scope of the subject, geography may indeed be faced with its own reappraisal. In this paper great importance is attached to the impact of the so-called *Scientific method* on geography, and whole of the paper is mainly devoted to the reformulation of general framework of geographical analysis.

Section 1. discussed various definitions of the field of geography and a suggestion was made to help to delimit the very broad field of geography.

Section 2. draws attention to some of basic characteristics of method of information processing. Three basic methods—induction, deduction and abduction—are identified and the interrelationship between these three methods is explained.

Section 3. deals briefly with very nature of so-called scientific method. Attempts are made to clarify meaning of "the control or manipulation of variables" and to draw attention to

similarities between natural and social sciences. The last section discusses some of the basic characteristics of geographical approach. The subject matter that comes within the field of geography, the geographical way of looking at objects or events, and tools and techniques which characterize the discipline are main themes of this section.

Profit Function as a Dual of Cobb-Douglas

Production Function

by Yasuhiko Torii

In the preceding versions of the subjective equilibrium model of farm household behavior mainly developed by the present author, there has been neglected, among other over-simplifications, the profit maximizing aspect of a farm. Another word of the same connotation is that the marginal conditions derived from the utility maximizing process have not been necessarily consistent with the prices of outputs and inputs guaranteeing the maximized profit. Actually, the previous models have not been equipped by the supply function (of output) nor the demand functions (of input factors).

In the present stage of improving the models, the author is intending to introduce the equilibrium price of agricultural output to be equated with the marginal conditions of both the utility maximization and the profit maximization. Whenever we try to introduce certain traditional type of utility function and/or production function, we can never be free from the familiar trouble of non-linear estimation of the simultaneous equation system. Specifically, at this stage, we are planning to introduce both of them into our model at the same time.

Thus, we have to find out some special treatment of the nonlinear recursive block for the production (profit maximization) block which guarantees to give the equilibrium price to the rest of the mode.

In this paper, it will be shown that the idea of profit function as a dual of the production function in the profit maximizing system may solve this problem. The idea of profit function, being originated by Shephard (1953), made more concrete by Uzawa (1964) with the concept of cost function, and studied in greater detail by McFadden (1966), will be applied for the case of Cobb-Douglas production function of degree of k .

$$Q = \prod_{i=1}^m X_i^{\alpha_i} \quad (\sum_{i=1}^m \alpha_i = k)$$

The derived profit function as the dual of the specified production function is of the following

shape.

$$\Pi^* = (1-k) \prod_{i=1}^m \left(\frac{p_i}{\alpha_i} \right)^{-\alpha_i(1-k)^{-1}}$$

The derived profit function shown above has the shape of Cobb-Douglas function, and, accordingly makes it possible to have the logarithmic linear estimation of itself.

Also it must be noted that the price data employed in the estimation of the profit function guarantee conditions in the rest part of the model.

The factor demand function of the i th factor is directly derived by differentiating the profit function by the corresponding price.

$$X_i = \alpha_i \left[\prod_{i=1}^m \alpha_i^{\alpha_i(1-k)^{-1}} \right] \frac{\Pi^*}{p_i^k}$$