

ARTICLES, PAPERS AND PUBLICATIONS OF ACTUARIAL INTEREST

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Millbank Memorial Fund Quarterly, Vol. 35, No. 2, April 1957

JACOBSON, P. H. *An Estimate of the Expectation of Life in the United States in 1850.*

This estimate (for the white population) was derived by taking as the basic central death rates by age the arithmetic mean of values for Maryland and Massachusetts, the only States for which mortality data for 1850 are available. Such an average approximates to the experience of the United States as a whole over the period for which comprehensive statistics have been available. The expectation of life in years at birth is estimated for males at 40.4 and for females at 43.0. These values agree closely with those derived by Meech based on census data for 1830-60. This is slightly more favourable than for England and Wales at the same period of time (39.9 and 41.9).

MADIGAN, F. C. *Are Sex Mortality Differentials Biologically Caused?*

This is an attempt to carry out a study of groups 'in which cultural stresses and strains had been so standardized between sexes that one could observe the operation of biological factors in comparative isolation'. The subjects chosen were teachers and personnel of administrative staffs of Roman Catholic religious Brotherhoods and Sisterhoods engaged in educational work (health and domestic auxiliaries were excluded). Analysis of the mortality rate is held to suggest that biological factors are more important than sociocultural pressures and strains in relation to differential sex death rates and that the greater sociocultural stresses associated with the male role in society play only a small and unimportant part in producing the differentials between male and female death rates. The studies, which were assisted by the National Institutes for Health, are continuing.

The Journal of Industrial Economics, Vol. 5, No. 2, March 1957

FLORENCE, P. SARGANT. *The Reward for Risk-bearing by Shareholders in Large Companies.*

The article describes an investigation into the financial gain or loss made by shareholders in large companies over the period 1936-51. The public joint stock companies that were surveyed were all the English entries in the Commercial and Industrial section of the Stock Exchange Year Book with nominal issued capital of £1,000,000 or more in 1951, subdivided into 'very large' companies with £3,000,000 nominal issued capital or more, and 'medium large' companies with less; and a stratified sample as representative as possible of 'smaller large' companies with issued capital between £200,000 and £1,000,000. A similar survey was made of companies

in the brewery section of the Year Book. The result was a sample of 304 companies classified as 'Very Large' 81, 'Medium Large' 134, and 'Smaller Large' 89.

The analysis is shown in the form of tables showing the 'extent of gain or loss' from dividend and change in capital values, separately and in total. The coefficient of correlation, coefficient of variation and other statistical measures have been obtained for each class of company. The kind of information that can be obtained from the analysis is, for example, that the arithmetic mean gain from the investment over the period was highest for the 'smaller large' companies but that the variation of the gain was greatest for these companies.

In the later sections of the paper the author discusses whether the investor has been paid enough as a compensation for bearing the risks. Comparisons are made with investment in the Post Office Savings Bank and 'investment' in lotteries. The point that it may have paid to 'invest' in consumption goods whilst prices were low is also considered. Finally, the author considers whether people are rational in their attitude towards these different types of risk and why the whole mechanism of issuing shares and buying and selling them on the Stock Exchange has such a poor reputation among many sections of the general public.

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE
Economica, New Series, Vol. 24, No. 94, May 1957

MORGAN, E. VICTOR AND TAYLOR, CYNTHIA. *The Relationship between the Size of Joint Stock Companies and the Yield of their Shares.*

A sample of companies was obtained by taking all those mentioned in the 'Company Comments' column of the *Financial Times* during the year from August 1954 to August 1955 and then excluding companies not primarily engaged in manufacture or trade within the United Kingdom, companies which did not declare a dividend during the year, and a small number of companies for which all the information required could not be obtained. The analysis was based on the resulting list of 553 companies.

In constructing correlation tables the following variables were considered:

- (1) Size of Company and Dividend Yield at date of comment in the *Financial Times*.
- (2) Size of Company and Dividend Yield at 13 August 1955.
- (3) Size of Company and Earnings Yield at date of comment.
- (4) Size of Company and Dividend Cover at date of comment.

The analysis under heading (1) was also done for various Industrial Groupings. In the case of (1) and (2) there was significant negative correlation supporting the hypothesis that the shares of the larger companies tended to give the lower yields. In (3) the negative correlation was small, whilst in (4) correlation was absent.

Finally, the authors consider some of the reasons why the shares of large companies might be expected to have lower yields than those of small companies. One of these reasons concerns the investment policy of large institutional holders of securities.

THE ROYAL ECONOMIC SOCIETY

The Economic Journal, Vol. 67, No. 266, June 1957PRAIS, S. J. *The Financial Experience of Giant Companies.*

The National Institute of Economic and Social Research has recently published a series of tables of summarized company accounts, including a table relating to the hundred largest companies operating in the United Kingdom. In this article the author compares the summarized accounts of these hundred 'giants' with those of the rest numbering approximately 2800 companies. The accounting period is 1948-53.

The comparison has been made in respect of such factors as growth in profits during the period, the proportion of income ploughed back, the composition of new issues, the proportion of assets held in liquid form, the variability of financial experience and the effect of the type of industry on the rate of expansion.

Westminster Bank Review, May 1957SCHWARTZ, G. *The Future of Savings.*

The article draws attention to the fact that we are living in 'an unprecedented age in respect of capital development'. Post-war investment in the U.K. has been inadequate but has, nevertheless, placed excessive strain on the real resources of the country. Mr Schwartz seeks an answer to the question 'who is going to release the resources?'. Personal saving of the traditional type is dissuaded by high taxation and indirect personal saving through institutional channels is the primary method supplemented (perhaps to some degree offset) by compulsory saving exacted through budgetary control. Some criticism is made of the apparent current disdain for the role of the rate of interest and of failure to face adjustments demanded by the heavy capital needs.

The Bankers' Magazine, Vol. 184, No. 1360, July 1957*Our New Index Number.*

For many years the *Bankers' Magazine* has been publishing index numbers measuring the changes in value of fixed portfolios of securities. The constituents and methods of grouping have now been changed and this article explains the new series of index numbers in detail.

The new index numbers still represent the changes in fixed portfolios and therefore provide information different from that provided by either the *Financial Times* Index or the Actuaries' Investment Index. There are various sub-index numbers for groups of fixed interest securities and groups of equities. A useful innovation is the grouping according to size of company, there being five groups as follows: leaders, large, large-medium, small-medium, smaller.

CRICK, W. F. *The Scope and Limitations of Monetary Policy.*

The author defines Monetary Policy as follows: 'Monetary policy expresses itself in action taken by a government, or by a body empowered by government or legislature for the purpose, to influence the volume of money in

existence and the disposition and use of money and other liquid assets with the object of regulating the purchasing power of money, the balance of external payments and receipts, the level of business activity and the course of economic expansion.'

Drawing on examples from various countries the author discusses the obstacles to effective policy that are bound to arise. The types of obstacle are considered under the headings:

- (1) those that arise from the diversity of purposes which monetary policy is nowadays expected to serve,
- (2) those that arise from shortcomings within the structure or mechanism of the monetary system itself, and
- (3) those that arise from particular systems, forms and obligations of government.

Applied Statistics, Vol. 6, No. 1, March 1957

KLEIN, L. R. *The Scope and Limitations of Econometrics*.

The author describes the theory of econometrics as designed to discover how best to measure in economics, i.e. to set out the properties of measurement methods so as to enable a choice of technique to be made. It is emphasized that there is one dominating characteristic of econometric problems, namely that they deal with non-experimental data. The article discusses the way in which econometric techniques (based on *a priori* information) can be developed to estimate inter-relationship between economic variables with illustrations of particular problems. A good selective bibliography is given.

PUBLICATIONS ISSUED BY HER MAJESTY'S STATIONERY OFFICE

Census 1951, England and Wales. Industry Tables. (147s.)

This volume gives statistics of the occupied population analysed by industry, with identification of industrial status categories, sex, age-groups and married women. An analysis of each important industry or group of industries showing the principal occupations contributing to the industry is also included.

National Insurance Act, 1957. (9d.)

The Act enables retirement pensioners under age 70 (65 for women) to surrender pension temporarily and earn pension increments by paying contributions during employment or self-employment and enables widow beneficiaries to earn pension increments by deferring retirement. It alters the conditions for benefit in respect of certain adult dependants, the conditions for unemployment benefit to persons on short time whose working week is less than six days, the conditions for death grant, etc.

The Registrar General's Statistical Review of England and Wales for 1954. Part III, Commentary. (8s.)

Previous issues were called 'Text Volume'. It provides a commentary on the statistics for 1954 already published in the Tables volumes. There are many tables.