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UNITED STATES DEPARTMENT OF AGRICULTURE

Bureau of Agricultural Economics

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Agricultural Economics Bibliography No. 14

**FACTORS AFFECTING PRICES**

**A Selected Bibliography, Including Some References on the  
Theory and Practice of Price Analysis**

Compiled by Louise O. Bercaw  
under the direction of Mary G. Lacy, Librarian,  
Bureau of Agricultural Economics

Washington, D. C.  
March, 1926.

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## INTRODUCTION

This bibliography is an attempt to make an annotated list of recent work on the economic-statistical analyses of price movements. It is hoped that it is fairly complete in the field of agriculture, but no effort has been made to make it complete in other fields such as coal, iron, petroleum, etc. As a rule, references to index numbers, cost of production, and prices as affected by war conditions have been omitted. Some references to business and generating cycles and methods for the statistical analysis of prices have been included. In the selection and classification of material Mr. Mordecai Ezekiel of the Division of Farm Management and Costs, Bureau of Agricultural Economics, has been a great assistance.

The index is designed to bring out all names of authors and all references to commodities and to bibliographies and bibliographical footnotes which have been mentioned in this list. Attention is also called to a bibliography which may be of interest to the student of prices, but which is not included in the "Sources Consulted" since no attempt has been made to cover the subject prior to 1915. This is a "Bibliography of the Prices of Cereals" which is found in the Journal of the Royal Statistical Society, v. 71, pt.1, March, 1908, p.178-206.

Mary G. Lacy, Librarian.  
Bureau of Agricultural Economics,  
U. S. Department of Agriculture.

March, 1926.



## SOURCES CONSULTED

1. Card catalogues in the following libraries:
  - U. S. Department of Agriculture.
  - U. S. Department of Agriculture. Bureau of Agricultural Economics.
2. Agricultural Index, 1916 - Nov. 1925.
3. Public Affairs Information Service. Bulletin, 1920 - 1925.
4. Bibliographies:
  - List of recent references on the factors influencing the prices of staple agricultural products, compiled by the Division of Bibliography, U. S. Library of Congress. Nov. 22, 1921.
  - Prices; a short selected list, compiled by Anna Dewees. May 27, 1922. Typewritten.
  - Also bibliographies in certain articles and publications included in this list.
5. Periodicals:
  - The files of the following periodicals, 1915-1925: American Economic Review; Economic Journal; Journal of Farm Economics; Journal of Political Economy; the Journals of the American Statistical Association and the Royal Statistical Society; and the Quarterly Journal of Economics.





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#### Economic Studies of Price Variations

1. Academy of political science, New York. The future of prices at home and abroad ... edited by William L. Ransom and Parker Thomas Moon. N. Y., Academy of political science, Columbia university, 1925, 205p. (Its Proceedings, v.11, no.2, Jan. 1925) 280.9 Acl  
Part II, Factors affecting the general price level. Contents:  
Theory and practice, by P. M. Warburg.- The movement of wages and the future of prices, by P. H. Douglas.- Taxation and prices, by E. R. A. Seligman.- The present relationship between credit and prices, by H. P. Willis.- The relation between industrial management and price levels, by M. W. Alexander.- The future of wages and labor costs, by Leo Wolman.- Future price trends, by J. O. Downey.- Discussion: Wages and index numbers of prices, by John Bauer.- Discussion: The relation between prices and wages, by A. S. Miller.- Discussion: The rediscount rates of the Federal reserve system, by M. J. Murphy.
2. Bell, Spurgeon. Fixed costs and market price. (In Quarterly Journal of Economics, v.32, no.3, May, 1918, p.507-524) 280.8 Q2  
"It is a fair prediction that for many decades the analysis of cost will continue to be the more important element in the attempt to explain business enterprise. It is the purpose of this paper to show how a classification of costs different from that commonly employed will throw light on the nature of competition and the adjustment of market prices."- p.507.
3. Black, J. D. Elasticity of supply of farm products. (In Journal of Farm Economics, v.6, no.2, Apr. 1924, p.145-155) 280.8 J822  
"One of the many unexplored portions of the field of economics is the relation between price and subsequent output - what is sometimes called the elasticity of supply."
4. Bowley, A. L. The theoretical effects of rationing on prices. (In Economic Journal, v.30, Sept.1920, p.340-347) 280.8 Ec72  
"The analysis that follows is based on simplified hypotheses, but it is believed that the broad results would be little affected if the basis was made more general."
5. Commons, J. R. The stabilization of prices and business. (In American Economic Review, v.15, no.1, March, 1925, p.43-52) 280.8 Am32
6. Estey, J. A. Stabilizing agricultural prices. (In Journal of Political Economy, v.33, no.1, Feb.1925, p.81-93) 280.8 J82

7. Foster, W. F., and Catchings, Waddill. Profits. Boston and New York, Houghton Mifflin co., 1925. 435 p. 280 F81.  
Part IV, p.159-220, deals with the "function of prices and profits."  
"Buyers determine prices": p.169-179.
8. Friday, David. Profits, wages, and prices. N. Y., Harcourt, Brace and Howe, 1920. 253 p. 284.3 F91  
See particularly chapters 8 and 9. How Europe Raised American Prices, and Prices Since the Armistice.
9. Gillette, H.P. A comprehensive study of the causes of high prices, with answers to 20 economic questions. Chicago, Engineering and contracting pub. co. 1920? 62p. 284.3 G41  
"Reprinted from Engineering and Contracting, April 7, 1920."  
"Lest the title of this article give an impression that it is either very 'theoretical' or 'mathematical', let it be known that it is highly 'practical' and that an understanding of it involves no more knowledge of mathematics than is required to solve the simplest problems in arithmetic." - p.1.
10. Hansen, A. H. The effect of price fluctuations on agriculture. (In Journal of Political Economy, v33, no.2, Apr.1925, p.196-216) 280.8 J82
11. Hobson, Asher. Why prices fluctuate. Chicago, 1923. 40 p. (American institute of agriculture. Lesson N) 280.3 Am34A
12. Hobson, J. A. Causes of the rise in prices. Washington, Govt. print. off., 1912. 10p. (U. S. 62d Cong. 3d Sess. Senate. Doc. 980)
13. Knight, T. H. The concept of normal price in value and distribution. (In Quarterly Journal of Economics, v.31, no.1, Nov.1917, p.86-100) 280.8 J2  
"The present paper is an attempt to examine, clarify and make precise the meaning of normal price, with especial reference to differences in the way in which it is to be defined in the two leading classes of price problem with which economic theory deals." - p.66.
14. Laughlin, J. D. Money and prices. N. Y., Charles Scribner's sons, 1920. 314 p. 284.3 L36  
The first chapter is A Theory of Prices.
15. Lawrence, E. W. P. Why prices rise and fall. London, Humphrey Milford, Oxford university press, 1920. 53p. 284.3 L43  
"Written for the man or woman who wishes to understand the economic basis of prices." - Preface.
16. Layton, W. I. An introduction to the study of prices with special reference to the 19th century. London, Macmillan and co., limited, 1920. 194 p. 284.3 L45  
"It is hoped that the following pages, as the title implies, will serve to introduce the reader to current economic ideas as to the causes which determine the purchasing power of money; while the historical chapters may prove to be a sufficient commentary on the chart at the end



of the book to familiarize the reader with the actual course of prices in the nineteenth century."

17. Lewis, G. N. A plan for stabilizing prices. (In Economic Journal, v.35, Mar. 1925, p.40-46)
18. Martin, P. W. The flow in the price system. London, P.S.King & Son, Ltd., 1924. 109 p. 284.3 M36  
In the introduction the author writes that this book "is a plain description of a fundamental defect in the business machine and a tentative suggestion for mending it."  
Bibliographical data are to be found in the Appendix, p.95-109.
19. Murray, M. C. The trend of prices. (In Journal of Farm Economics, v.3, no.3, April, 1921, p.73-81) 280.8 J822  
"For the purpose of analysis, we may assume that the price of an article at any time is subject to three distinct influences, resulting in three different kinds of trends." - p.73.
20. New Zealand. Registrar-general's office. Prices: an inquiry into prices in New Zealand, 1891-1919, by Malcolm Fraser. Wellington, 1920. 191p. 284.3 N48  
The book is divided into five parts. Part I deals with the "nature and purpose of the investigations;" part II, with retail prices; part III, with wholesale prices; part IV, with producers' and export prices; and part V is a "general survey of index numbers."
21. Norton, J. E. International trade and prices. (In Quarterly Journal of Economics, v.33, no.2, Feb. 1919, p.368-373) 280.8 Q2  
The writer comments on Professor Wicksell's note "on price levels and international trade" in the Quarterly Journal of Economics for February, 1913.
22. Nourse, E. G. Normal price as a market concept. (In Quarterly Journal of Economics, v.33, no.4, Aug.1919, p.632-651) 280.8 Q2  
"Writers have habitually given us a production-adjustment concept of price normality and have generally had their minds filled with industrialized processes of production, in which the flow of goods is continuous or, at least, has its stoppings and startings, its expansion and curtailment, largely under control toward the end and purpose of making supply such as to command a remunerative price ... The concern has been too exclusively with the normality of supply conditions, and little or nothing has been said about the normality of the demand which comes to effective expression in the market, or concerning the adequacy of the market mechanism to bring about normal adjustments of actual supply and actual demand conditions. The stark cost-of-production concept of normal price is insufficient to the economist's need in attacking the problem of market systems and methods as a factor in price determination. And this inadequacy is particularly evident in the case of those extractive products which are not produced by highly industrialized processes and for which, therefore, the conditions of supply are highly adventitious ... The present writer's interest lies in the field of agricultural operations, and here we may find ample illustrations for our purpose.  
- p.653-654.

23. Pigeu, A. G. Prices and wages from 1896-1914. (In Economic Journal, v.33, June, 1923, p.165-171) 280.8 Ec72

"On the whole, however, though no exact statistical investigation is possible, the general result of our study suggests that the part played by gold and price movements in causing the set-back to real wages of which we have record in our period was probably small." -p171.

24. Rogers, J.L.T., comp. A history of agriculture and prices in England, from the year after the Oxford Parliament (1259) to the commencement of the Continental War (1793). Oxford, Clarendon press, 1866-1902. 7 v. in 3. 284.3 R65H

These volumes "are an attempt to satisfy a total void - the complete absence of all satisfactory information on prices in medieval England." - Preface.

25. Silberling, W. J. Graphic illustration of the laws of price. (In American Economic Review, v.14; no.3, Sept. 1924, p.417-442) 280.8 Am32

"The object of this paper is to investigate the methods of graphically representing demand and supply factors for several broad groups of cases. First of all, we have cases involving time periods of varying length, during which the price-making forces operate. Secondly, there are the generally recognized cases under the head of long-time or 'normal' price determination according to the circumstances influencing the volume of commodities or services coming into the market." - p.417.

26. Taussig, F. W. Is market price determinate? (In Quarterly Journal of Economics, v.35, no.3, May, 1921, p.394-411) 280.8 Q2

"The present paper is meant to point out some modifications or corrections of the usual statement of the theory of demand and the interplay of supply and demand. I am by no means sure that the suggestions are novel; nor do they tend to alter the essentials of received economic theory. But they may indicate wherein current versions are not in accord with the course which prices take under some familiar conditions, and thereby they may contribute toward an end of much consequence for the advance of economic science - the ascertainment of the precise relation between the short-period 'irregular' phenomena and those long-period 'normal' movements which have received most attention from economists." - p.394.

27. Taussig, F. W. Some aspects of the tariff question. Cambridge, Harvard university press, 1915. 374 p. 285 T19

"The main purpose of the present volume is to consider and illustrate some questions of principle in the controversy on free trade and protection." - Preface

Chapter I, Duties, Imports, Prices, p.3-17. "In this introductory chapter I shall consider, even at the risk of repeating elementary matter, the way in which duties work, the significance of the continuation of imports after duties have been imposed, and the possibility of measuring the charge which they lay on the community." - p.3.



28. U. S. Congress. House. Committee on foreign affairs. Steadying the world's price of the staples. Hearings ... on H. J. Res.311. A joint resolution instructing the American delegate to the International institute of agriculture to present to the permanent committee for action at the general assembly in 1915 certain resolutions. Washington, Govt.print. off., 1914. 34 p. 284.3 Un33  
"The world's price of the staples - how it is arrived at -- its bearing on the economic status of the people" by David Lubin:p.17-30.
29. Viner, Jacob. Taxation and changes in price levels. (In Journal of Political Economy, v.31, no.4, Aug.1923, p.494-520) 280.8 J82  
"The relation of taxation to price levels is a problem of sufficient importance to merit a greater measure of attention from students of government finance than has been vouchsafed to it in the past. This article is an attempt to open up the subject in the hope that it will lead to further discussion of the general problem and its detailed manifestations." - p.494.
30. Wicksell, Knut. International freights and prices. (In Quarterly Journal of Economics, v.32, no.2, Feb. 1918, p.404-410) 280.8 Q2  
Intended as a complement to "an article by Professor Taussig on international trade under depreciated paper" in the Journal for May, 1917. Pages 410-414 contain comments by F. W. Taussig on Professor Wicksell's article.
31. Wright. P.G. Cost of production and price. (In Quarterly Journal of Economics v.33, no.3, May,1919, p.560-567) 280.8 Q2  
Comment on Marshall's and Walker's theories as to which of the costs of production is the economic force that determines long-run or normal price.
32. Wright, P. G. Influence of the tariff on prices. (In American bankers association. Journal, v.16, no.5, Nov.1923, p.301-303) 284.8 Am3
33. Young, A. A. The trend of prices. (In American Economic Review, v.13, no.1, Sup., March, 1923, p.5-14) 280.8 Am 32  
"It would be unprofitable for me to attempt to make this paper a summary of the statistics that bear upon the problem of the course of prices in the immediate future. Such statistics are now marshalled, organized, and interpreted by groups of investigators engaged in forecasting general economic conditions ... I have concluded to limit myself to a review of some of the more important elements of the problems."-p.5.

Descriptive Studies of Prices

34. American academy of political and social science. Prices. Philadelphia,1920. 289p. (Its Annals, v.89,no.178, May,1920) 284.3 Am34  
Contents of Part II, Price factors in typical commodities, p.44-134; The trend in wholesale prices for the products of American farms during

the war period, by C. L. King - The after-war fall in meat prices, by L. D. H. Feldt.- Price fluctuations in the woolen industry, by Katharine Snodgrass.- Price factors in men's ready-to-wear clothing, by Siegmund Sonnenschein.- The housing shortage and the supply of building materials, by Homer Hoyt.- Housing and building conditions, by E. T. Trigg.- Lumber prices, by R. C. Bryant.- Minerals as essential raw materials, by G. O. Smith.- Copper, by B. S. Butler.- The petroleum resources of the world, by David White.

35. Bureau of Railway economics. Commodity prices in their relation to transportation costs. Bulletins 1-11. Washington, 1924-1926. 284.3 B89  
Bulletin 1 - Grains - wheat, corn and oats. Jan. 1, 1924.  
Bulletins 2, 4, 6, 11 - Livestock - cattle and calves, hogs and sheep. Feb., May, Dec. 1924, Jan. 1926.  
Bulletin 3, 9 - Cotton. March, 1924, Sept. 1925.  
Bulletin 5 - Potatoes. Oct. 1924.  
Bulletin 7 - Wheat, Feb. 1925.  
Bulletin 8 - Corn and oats. June, 1925.  
Bulletin 10 - Oranges. Nov. 1925.
36. Burton, T. E., and Seldon, G. C. A century of prices; an examination of economic and financial conditions as reflected in prices, money, rates, etc. during the past 100 years, with a view to establishing general principles which may aid in interpreting the present and future. N.Y., The Magazine of Wall Street, 1919. 118 p. 284.3 B95  
Bibliography: p.111-118.  
"History tells what happened, but these graphs, with the keen analyses which accompany them, show why it happened, and explain the great controlling principles of business and finance in the straightforward fashion of one business man talking to another." - Introductory note.
37. Emery, H. C. The tariff and the ultimate consumer. (In American Economic Review, v.5, no.3, Sept.1915, p.534-553) 280.8 Am32  
"The purpose of this article is to emphasize the fact that, both in the theoretical discussion of the tariff question and in the practical determination of tariff rates, an important element of the problem has too frequently been omitted. I refer to the great difference between producer's prices and consumer's prices and to the relation which exists between the two." - p.534.
38. Falconer, J. I. Prices of Ohio farm products. Wooster, 1923, p.101-143. (Ohio Agr. Exp. Sta. Bul. 365)  
"It is not the intention of this bulletin to discuss the spread which occurs between the price which the farmer receives and the price which the consumer pays for the same commodity or the products of the same commodity. It is the purpose, rather, to set forth some of the leading factors, of interest to the Ohio farmer, which have to do with price changes and relationships ... Several tables of prices of Ohio farm products, extending over a series of years, are included in this bulletin." - p.101.
39. Frank, L. K. Long term price trends. (In American statistical association Journal, v.18, n.s., no.143, Sept. 1923, p.904-911) 251 Am3



40. Great Britain. Board of Trade. Wholesale and retail prices ... "Report on wholesale and retail prices in the United Kingdom in 1902, with comparative statistical tables for a series of years." London, H. M. Stationery off., 1903. 456 p.  
This volume embodies the "results of an investigation carried out by the Labour Department with regard to the course of prices in the United Kingdom." - pXIII.
41. Great Britain. Ministry of agriculture and fisheries. Report of the committee on stabilization of agricultural prices. London, H.M. Stationery off., 1925. (Economic series no.2) 106p. 280.9 G792  
"In this Report we propose to summarize briefly the main facts in regard to the fluctuations of agricultural prices, directing special attention to their economic causes, their harmful consequences, and the general principles upon which remedies may be applied." - p.7.
42. Holmes, G. K. Cold storage and prices. Washington, 1913. 116 p. (U.S.Dept. Agr. Bur. Statis. Bul. 101)  
"Supplementary to the bureau's investigation of the business features of the cold storage of fresh beef, mutton, and pork, and dressed poultry, butter, and eggs, a large amount of work was done to collect information concerning the seasonal prices of these commodities as far back as 1880, in the period antedating cold storage. The object was to ascertain whether cold storage has had any influence on prices."
43. Jordan, D. F. Business forecasting. N. Y., Prentice-Hall, inc., 1921. 270 p. 280 J76  
"The influence of a money economy." - p.44-56.
44. Pope, J. D. Prices of farm products in Alabama. Auburn, 1926. 76 p. (Ala. Polytechnic institute. Ext. serv. Circ.91)  
"The purposes of this bulletin are (1) to furnish a series of prices paid to farmers in Alabama for their most important products, (2) to show the relationship of present prices to the pre-war level, and other significant price relationships, (3) to discuss briefly some of the more important factors which affect the prices of farm production in Alabama." - p.4.  
Products are cotton, peanuts, sweet potatoes, hay, corn, beef cattle and sheep, hogs, eggs, and dairy products.
45. Pope, J. E. Can the farmer realize higher prices for his crops by holding them. (In Quarterly Journal of Economics, v.30, no.4, Aug.1916, p.805-831) 280.8Q2  
"Agricultural products fall into two groups, those which are bought and sold speculatively and those which, owing to their perishable nature or their incapacity to be standardized, are not so bought and sold. I shall consider in succession several products of the first class, namely, wheat, corn, oats, and cotton, seeking in each case an answer to the question - will it be more profitable for the farmer to sell his crop when it is ready for the market, or to store it and hold it for better prices?" p.806.  
Also in Price Current-Grain Reporter, v.83, June, 23, 1920, p.1462-1464.

46. Sewille, G. P. Relationship between production and price for some New York crops. (3.) numbered leaves.  
Miscographed sheets showing prices and production for apples, potatoes, hay and cabbage, prepared in the Dept. of Agricultural Economics and Farm Management, New York State College of Agriculture, Cornell University.  
Somewhat similar information is to be found in Farm Economics, published by the same department of the University.
47. Warren, G. F. Prices of farm products in New York. Ithaca, 1923. 63p. (N.Y., Cornell, Agr. Exp. Sta. Bul.416)  
"This bulletin was written by G. F. Warren, but some parts of it, particularly those parts dealing with seasonal variations, cycles, and correlations, are the joint work of the author and F. A. Pearson." - p.3  
Factors affecting prices: p.11-34.
48. Warren, G. F. Prices of farm products in the United States. Washington, 1921 73p. (U. S. Dept. Agr. Bul.999)  
"The primary purpose of this bulletin is to present basic statistics, not to give an extended discussion of causes or of remedies." - p.23.

#### Cattle

49. U. S. Tariff commission. The cattle industries of the United States and Canada. Washington, 1925. 51 p. 173 T17Ca  
"The degree to which the tariff was effective in giving domestic beef prices a trend distinct from that of the export markets can not be definitely determined, but by discouraging importations it undoubtedly was a contributing factor." - p. 18.

#### Cement

50. Willis, H. P., and Byers, J. B. B. Portland cement prices: their basis, character, and present position. N. Y., Ronald press co., 1924. 123p. 284.3 W67  
"The following pages present a detailed analysis of the current position of prices and price levels in the Portland cement industry." - Preface.  
Frank A. Fetter in the Economic Review for December, 1924, discusses this book in an article entitled Economics and Portland Cement Prices.

#### Eggs

51. Groesbeck, B., and Urner, F. G. Economic effect of cold storage upon the average price of eggs. N. Y., Joint commission of cold storage warehousemen and affiliated industries, 1916. 10p. 295 G Pam. Coll.
52. Hervey, G. W. Egg prices and cold storage holdings. New Brunswick, 1923. 4p. (N.J. Agr. Exp. Sta. Hints to poultrymen, v.11, no.10, July, 1923)

#### Grain

53. Barket, Arthur. The British corn trade from the earliest times to the present day. London, Sir I. Pitman & Sons, ltd., 1920. 132p. 59 B24  
"Two hundred and fifteen years of wheat prices in England" p 32-51.



54. Boyle, J. E. Chicago wheat prices for eighty-one years: daily, monthly and yearly fluctuations and their causes. [Ithaca, N. Y.] 1922. 16p. 12 charts. 284.3 B69  
"Present factors and future factors, so far as they can be forecast, all enter into the making of the price. The graphs on the following pages illustrate some of these factors. It would prolong this discussion unduly to list the factors causing the daily fluctuations in price. Hence the attempt is made here to record only those factors which cause monthly and yearly swings in price."- from paragraph on Price Factors, p4, Some prints have 71p., including diagrams and charts.
55. Fay, C. R. Corn prices and the corn laws, 1815-1846. (In Economic Journal, v.31, March, 1921, p.17-27) 280.8 Ec72  
"The few pages which follow were inspired by Tooke's work [The History of Prices?] and are offered to readers of this journal in the hope of providing yet another point of contact between the historian and the theorist." - p.18.
56. Goodman, P. S. Factors affecting the price of grain. Chicago, Clement, Curtis & co. [1916?] 11 p. Pam. Coll.  
"Address ... to the Michigan State Millers Association at Lansing, Jan. 19, 1916."
57. Kirkland, John. The relative prices of wheat and bread. (In Economic Journal v.6, Sept. 1896, p.475-484) 280.8 Ec 72  
"It is assumed that the relation between the price of wheat and that of bread is quite simple, and that even a small change in the one should produce some alteration in the other. It may be shown that this is not the case." - p.475
58. Kirkland, John. Three centuries of prices of wheat, flour, and bread. War prices and their causes. London, Published by the author of the National bakery school, Borough polytechnic institute, 1917. [64]p. 284.3 K63  
"References": p.64.
59. Mears, E. G. Wheat, wheat flour, and bread composite prices. (In Economic Journal, v.33, March, 1923, p.39-50) 280.8 Ec72  
"My article has two purposes. Firstly, to record a general agreement with the earlier writer [J.Kirkland] with respect to most of his findings. Secondly, to call attention to several considerations not previously cited which strengthen the bases for his deductions and at the same time open wide the field for fresh research." - p.38.
60. Strowbridge, J. W. Farm and terminal market prices: wheat, corn, and oats, crop movement year, 1920-21. Washington, 1922. 58p. (U.S. Dept. Agr. Bul.1083)  
"The object of this compilation was to ascertain a fair estimate of the average value per bushel of the entire crop of these grains rather than of a specified grade. Each of the tables has been divided into two sections, one of which gives cumulative data in 12 steps, each step being a complete summary from the beginning of the crop movement year to the end of the period and the other monthly data, complete for each month.  
A grain marketing chart is given to illustrate price-determining conditions at surplus producing and consuming points. Graphs and maps

illustrate the tabulated data." - Exp. Sta. Rec. v.48, p.92.

61. U. S. Federal trade commission. Report ... on wheat prices for the 1920 crop Dec. 15, 1920. Washington, 1921. 91 p. 173 F32Rwh  
The results of an inquiry into the causes of, and the remedies for, the decline in wheat prices. These conclusions are summarized on pages 6-10.
62. Lapoleon, L. B. Geographical phases of farm prices; corn. Washington, 1918, 53p. (U. S. Dept. Agr. Bul. 696)  
"The present investigation is confined chiefly to the influence of producing areas, trade routes, and consuming centers upon prices paid to farmers for corn and to a survey of the regional differences in such prices." - p.2.
63. Lapoleon, L. B. Geographical phases of farm prices: oats. Washington, 1919. 23 p. (U. S. Dept. Agr. Bul. 755)  
"In this bulletin a survey is made of the sectional differences throughout the United States in the producers' prices of oats. Some consideration is also given to the influence of producing areas, trade routes and consuming centers upon such variations, and to local factors, which qualify price advantage - factors such as relative yields in bushels to the acre and costs of production." - p.1.
64. Lapoleon, L. B. Geography of wheat prices. Summary of conditions affecting farm prices of wheat in different parts of the United States. Washington, 1918. 46p. (U. S. Dept. Agr. Bul. 594)

#### Hogs

65. Filley, H. C. Hog prices. Lincoln, 1925. 29 p. (Nebr. Agr. Exp. Sta. Bul. 200)  
"The more important forces which determine price are nine in number. They are as follows: 1. Supply and demand. 2. Cost of production. 3. Market strategy. 4. Monopoly. 5. The quantity of money in circulation and the rapidity with which it circulates. 6. Credit. 7 Transportation costs. 8. Commercial costs. 9. Import duties.  
"Some of these factors have but little effect on hog prices; others are very important. Following a brief discussion of each of these forces, graphs will be presented showing how the forces have influenced prices in recent years." - p.3-4.

#### Livestock and feed.

66. Burch, J. W. Trend of livestock and feed prices, by months. Columbia, 1925. 12p. (Mo. Univ. Col. Agr. Agr. Ext. Serv. Circ. 162)  
"It is the purpose of this circular to show what the trend of prices in the past has been by months for certain important classes of livestock and livestock feed." - p.1-2.



Lumber

67. Compton, W. M. The organization of the lumber industry, with special reference to the influences determining the prices of lumber in the United States. Princeton, Princeton university press, 1916. 153 p. 99.76 C73  
Thesis (Ph.D.) - Princeton university, 1915.  
"Originally issued by the American Lumberman, Chicago, without thesis note."  
This study of Mr. Compton's "is peculiarly timely for two reasons: It concerns an industry whose magnitude in value of product is (1909) surpassed by that of only two other industries. The owners of that industry have within a twelvemonth been petitioning the Federal Trade Commission in public hearings for relief from oppressive trade conditions. This study has the further merit of being one of the few serious attempts to discover correct methods of analyzing the influences which determine the price movement of a given commodity - a subject of no little current significance." - From Determinants of Lumber Prices, by George A. Stephens in the American Economic Review, June, 1918, p.289-305.
68. Goodman, R. B. The price of lumber; a study of the fundamental conditions in the lumber industry ... an address delivered at Yale university, January 20, 1921, under the auspices of the School of forestry on the 20th Engineers memorial foundation. New Haven, Yale university, School of forestry, 1921. 29 p. (Lumber industry ser. no.1) 99.9 Y1L  
"An analysis of the price of lumber calls for a survey of the basic conditions of its use, production, and the cost of the marginal supply. A criticism of the price of lumber calls for a study of the influence this price exerts upon our welfare. Incidentally, our study should give us a basis for anticipating lumber price movements for the present year, and lumber price trends of future years." - p.7.  
Bibliography: p.24-25.

Milk

69. King, C. L. The price of milk. Philadelphia, John C. Winston co., 1920. 336p. 44 K58.  
The forces that fix the price of milk: p.35-50.  
Some of the same material is to be found in his What Determines the Price of Milk (Chicago, American institute of agriculture, 1923. Marketing dairy products, Lesson 14)
70. New York (State) Dept. of farms and markets. A study of milk prices in various cities with special reference to the city of Albany. June, 1924. 14 numbered leaves. Mimeographed. 284.3 N483.  
"The primary object of this study is to show how the prevailing wholesale and retail prices for milk in Albany compare with those in nearby cities and also to make certain comparisons as to per capita consumption of milk, number of dealers, and sanitary regulations. Because the work is intended as a basis for further study of the situation in Albany, no attempt has been made to analyze in detail the factors affecting prices in the 17 cities for which statistics have been collected." - Leaf 1.

Petroleum products

71. U. S. Federal trade commission. Advance in the price of petroleum products. Washington, Govt. print. off., 1920. 57p. (66th Cong. 2d sess. House. Doc. 801) 173 F32Ad  
"Letter ... transmitting report in response to House Resolution no. 301, directing the Commission to make immediate inquiry into the cause of the recent advance in the prices of all petroleum products."

Potatoes

72. Sherman, W. A., and others. Marketing main-crop potatoes. Washington, 1923. 35p. U. S. Dept. Agr. Farmers' Bul. 1817)  
"This bulletin discusses some of the underlying facts and conditions that influence prices, the sources and character of the information the grower should use, and the differing marketing problems of the producers of the late or main crop. The location, shipping season, and relative importance of the heavy shipping districts are shown, with brief descriptions of the methods of marketing pursued in typical areas." - p. II.

Shoes and leather

73. U. S. Federal trade commission. Report ... on shoe and leather costs and prices. Washington, 1921. 212p. 173 F32S  
A report on "an inquiry into the cost prices and selling prices of shoe manufacturers and retailers for the years 1918 and 1919 and the cause of and necessity for the increase in prices. A proper analysis of the conditions required an inquiry into the leather industry also."

Sugar

74. U. S. Federal trade commission. Report ... on sugar supply and prices. Washington, 1920. 205p. 173 F32Su  
Prices: p. 94-126.
75. U. S. Tariff commission. The relation of the tariff on sugar to the rise in price of February-April, 1923. Washington, 1923. 26p. 173 T17R01  
"As the price of fine granulated sugar throughout the period examined in this report closely reflected changes in the price of the raw cane sugar, it will be necessary in the main for the purposes of this inquiry to examine only those influences which have brought about the rapid rise in the price of raw sugar." - p. 2.

Tobacco

76. U. S. Federal trade commission. Prices of tobacco products. Washington, 1922. 109p. 173 F32Pt  
"The principal supply factors affecting the price of leaf tobacco are generally quantity produced, consumed, and exported, and the stocks on hand, but unlawful combinations or restraints of trade among the large purchasers of leaf tobacco or among growers of tobacco may also affect both supply and price. Similarly, in the case of manufactured tobacco products, general supply and demand conditions determine the price unless



there is some activity by the manufacturers or jobbers in restriction of competition." -p.1.

77. U. S. Federal trade commission. Report ... on the tobacco industry. December 11, 1920. Washington, 1921. 162p. 173 F32Rt

"The main purpose of the Commission in its investigation, therefore, has been to determine the causes of the decline in the prices of leaf tobacco, and especially the decline in prices paid in certain sections for last year's crop ... A discussion of the evidence obtained relative to the various causes for the decline is presented in Chapter III.

"Some of the factors bearing on the situation are also discussed in Chapter IV in connection with their relation to the antitrust laws." -p.14

### Wool

78. Elliott, A. W. Course of wool prices for the last six years: an analysis of the situation. (In National association of wool manufacturers. Bul. v.53, no.1, Jan.1923, p.60-69) 45.9 N21B

In this paper, read before the American Association of Woolen and Worsted Manufacturers, Dec. 6, 1922, Mr. Elliott "traced the course of prices for wool in the world's market, discussed the causes producing them, and indicated what he believes will be the trend for some years to come." - p.60.

79. Great Britain. Board of trade. Standing committee on the investigation of prices. Profiteering act, 1919. Findings by a committee appointed to investigate the cost of production and distribution of wool, tops, and yarns at all stages and the profits arising therefrom. London, H.M. Stationery off., 1920. 8p. (Parliament. Papers by command. Cmd.535)

### Analytical Studies of Prices

80. Mitchell, W. C. Prices and reconstruction. (In American Economic Review, v.10, no.1, Sup. Mar.1920, p.129-155) 280.8 Am32  
Bibliographical footnotes.

"The chief aim of this paper is to consider what basis we have for forecasting the probable course of wholesale prices in the United States during the next few years." - p.129.

81. Poynting, J. H. A comparison of the fluctuations in the price of wheat and in the cotton and silk imports into Great Britain. (In Royal statistical society. Journal, v.47, pt.1, Mar.1884, p.34-74.) 251 R81J

Pages 65-74 consist of discussion on the article.

"A method of dealing with the statistics is first described which seems to give the fluctuations freed to some extent at least from 'accidental irregularities.' The results are then given of the application of the method to the price of wheat in England, France, and Bengal, taking the price as an indication of the harvest, and to the cotton and silk imports into Great Britain from various countries." - p.35.

82. Simpson, Kemper, A statistical analysis of the relation between cost and price. (In Quarterly Journal of Economics, v.35, no.2, Feb.1921, p. 264-287) 280.8 Q2  
Costs and prices are for book paper, newsprint paper, canned salmon sugar beets, and copper.
83. Wallace, H. A. Agricultural prices. Des Moines, Wallace publishing co., 1920. 224p. 284.3 W15  
"This book is written for all those who may be interested in the matter of prices of agricultural products, but more especially for the farmers of the corn belt states, students of agricultural colleges, county agricultural agents and leaders of farm organizations. Its purpose is to promote a better understanding of the factors which influence prices of farm products and stimulate an intelligent interest in statistical economics." - Preface.  
Mathematical study of supply and demand in the hog market: p.81-97.
84. Wallace, H. A. Supply and price interactions in farm and city products. (In American academy of political and social science. Annals, v.117, no.206, Jan.1925, p.243-247) 280.9 Am34  
"In this article the interactions of supply and price will be examined for corn, hogs, potatoes, pig iron and coal for the period 1882-1913. This study brings out in concrete quantitative fashion what farmers have been distinctly feeling for the past 60 years: that there is one law of supply and demand for city products and another for farm products."- p.243-244.
85. Working, Holbrook. Prices and the quantity of circulating medium, 1890-1921. (In Quarterly Journal of Economics, v.37, no.2, Feb.1923, p.228-253) 280.8 Q2  
"The present study was begun in the hope that a method might be developed for predicting changes in the general price level from current monetary statistics." - p.228.
86. Yule, G. U. Crop production and price: a note on Gregory King's law. (In Royal statistical society. Journal, v.78, pt.2, Mar.1915, p.296-298) 251 R21J

### Beef

87. Ezekiel, Mordecai. Correlations with beef prices, 1908 to 1914. (Feb. 11, 1926) 4 numbered leaves. Typewritten. Pam. Coll.  
Copy on file in the Library of the Bureau of Agricultural Economics, U. S. Department of Agriculture.  
"In an attempt to see how far beef prices could be explained by factors of the same type as had explained 80 per cent or more of hog price variations, a study was made of beef prices for prewar years ...  
"This preliminary study indicates that in spite of the complexity of the market for beef animals, the general price determining forces are as subject to measurement as in the hog market."



88. Schultz, Henry. The statistical measurement of the elasticity of demand for beef. (In Journal of Farm Economics, v.6, no.3, July, 1924, p.254-278) 280.8 J822

"Both in technical discussions of value and in the practical workings of our price-making system, one factor which constantly and significantly presents itself concerns the character of the demand schedule or so-called 'elasticity of demand.' There is hardly a text-book on economics in existence which does not devote a good deal of space to the exposition of the part played by this factor in price determination under both free competition and monopoly conditions ... The object of this paper is to determine ... the coefficient of the elasticity of demand - for an important article of consumption - beef."

### Cotton

89. Whelpton, P. K. Seasonal fluctuations in the price of cotton. (In Journal of Farm Economics, v.7, no.4, Oct. 1925, p.445-450) 280.8. J822.

### Grain

90. Boyle, J. E. Wheat prices and wheat receipts in Chicago: their correlation for ten crop years July 1, 1904 to June 30, 1914. 1923. 14p. 284.3 B69W

"This is by far the most important chart ever published showing effects of large and small wheat receipts on price. This chart disproves the claim that large receipts break the wheat market. The actual facts show that the Chicago wheat market is a perfect shock absorber so far as receipts are concerned." - p3.

- 90.a. Green, R. M. Seasonal fluctuations of wheat prices. Manhattan, 1925. 11 p. (Kansas Agr. Exp. Sta. Circ. 121)

91. Killough, H. B. What makes the price of oats. Washington, 1925. 39p. (U.S. Dept. Agr. Bul. 1351)

"Some selected references on grain price studies and statistical method." - p.38-39.

"The market price of oats, like the prices of all other farm products, changes from year to year, season to season, month to month, and day to day. It is commonly recognized that these price changes are caused by changes in supply or demand, or both; but the general phrase 'supply and demand' furnishes no precise explanation of given variations in price. A detailed study is necessary to define the supply, allocate the demand, and furnish quantitative measures of the influence of the various price-making forces." - p.1.

92. U. S. Dept. of agriculture. Bureau of agricultural economics. A method of estimating the May price of spring wheat. (In its Foreign Crops and Markets, v.10, no.19, May 11, 1925, p.549-552) 1.9 St2F

"May price in Chicago, Northern Hemisphere production, change in price April to September, price in September price level. Correlation of first differences of ratios to trend. (Based on work of E.M. Daggitt.)" Holbrook Working in Quarterly Journal of Economics, August, 1925, p.543.

93. Weston, I. H. The art of forecasting wheat by the use of harmonic cycles. Washington, 1925. 39p. 284.3 W52

"In the following pages I give the record mean price of wheat for each year in England from the year 1270 to 1909 in both a table and a diagram, also, in a diagram, the monthly mean price of wheat at Chicago, and Cincinnati from 1844 to present date. Special charts are given to illustrate the explanations regarding the method of forecasting by means of cycles. By means of these tables and charts I show in this work how a forecast of the wheat market can be made up for over 40 years."

### Hogs

94. Haas, G. C., and Ezekiel, Mordecai. What makes hog prices? A preliminary report. A study of prices and production over twenty years to determine what factors influence the price. U. S. Dept. of Agriculture, Bureau of Agricultural Economics, Divisions of statistical and historical research and Farm management and costs, 1925. 7p. Mimeographed. 1.9 Ec752W

"Monthly averages of Chicago prices of heavy hogs, corn-hog differential, live weight of hogs slaughtered under Federal inspection, price of corn, and price level. Based on curvilinear multiple correlation of percentages of moving averages or other trend after correction of certain data for price level and seasonal variation." - Holbrook Working in Quarterly Journal of Economics, Aug. 1925, p.542-3.

95. Sarlo, C. F. Forecasting the price of hogs. 22p. (American Economic Review, v.15, no.3, Supplement no.2, Sept. 1925) 280.8 Am32

"An essay awarded the Babson prize by the American Economic Association."

"The price of corn at a given time depends primarily upon the supply. Supply is determined principally by the weather ... The price of hogs at a particular time depends on various factors of supply and demand. The weather has relatively little direct influence on the supply of hogs. The size of the corn crop for several years past is an important factor affecting the supply of hogs."

96. U. S. Dept. of agriculture. Bureau of animal industry. Conditions affecting the price of hogs. 1891. (In its sixth and seventh annual reports for ... 1889 and 1890, p.84-92) 1 An5

A brief statement of the facts and conclusions of an investigation of this subject. Illustrated by tables and diagrams.

97. Wentworth, E. H. and Ellinger, T. U. Determination of hog prices at public markets. (In Journal of Farm Economics, v.6, no.3, July, 1924, p.279-282) 280.8 J822

"Because of the significance of market prices in the economy of farm operations and because of the varying beliefs and traditions in vogue concerning the factors influencing them, it has appeared important to analyze, by means of adequate statistical methods, the problem of price determination at public livestock markets."



98. Wright, Sewall, Corn and hog correlations. Washington, 1925. 60p.  
(U. S. Dept. Agr. Bul. 1300)

"Acreage, yield per acre, production, and farm price Dec. 1 of corn, annual western pack, annual eastern pack, western summer pack, western winter pack, average live weight western summer pack, average live weight western winter pack, total live weight western summer pack, total live weight western winter pack, average price western winter pack, farm price Jan. 1 of hogs. Multiple correlation of deviations from trend with analysis of path coefficients for concurrent deviations and various lags."  
- Holbrook Working in Quarterly Journal of Economics, Aug. 1925, p. 542.

### Iron

99. Blackett, O. W. Some price-determining factors in the iron industry. (In Review of Economic Statistics, v. 7, no. 3, July, 1925, p. 198-207)  
251.8 R32

"The object of this paper is to assemble and weigh the statistical evidence bearing on one phase of the pre-war history of pig iron prices, namely, the amplitude or extent of pig-iron price movements."

### Meat

100. Hannaford, D. O. A study of the importance of the various factors influencing the demand for meat in various places ... and the distribution of meat in metropolitan Boston. Cambridge, Mass., May, 1924. 2v. in 1. Type-written. 50 H19

Bibliography: leaf 2-3, v. 1.

"The object of this study [first] is to analyze, describe, and estimate the importance of the various factors influencing the demand for meat in various places for which data are available, and particularly for Boston, as shown in variations in demand through a period of time. Available data on consumption and price for the country as a whole, and for Boston, have been collected from primary and secondary sources, charted, and compared with the indices of business conditions in an effort to determine the causes of periods of depression and prosperity in the meat industry and to determine the effects of general depressions and prosperity on the industry. Data for Great Britain also have been examined as representative of the leading foreign market." leaf 1, v. 1.

"Obviously, the determination of the factors which affect the supply, quality, and price of meat is of vital importance. It is almost a commonplace to say that such a determination can be accomplished best by tracing distribution through the most complex of its channel - the wholesaler - retailer-consumer link.

"With this in mind it was deemed advisable to consult the retail merchants in an effort to gauge those intangible elements of thought and opinion; for these are the factors that exert such a large influence on this question." - leaf 1, v. 2.

Melons

101. Hedden, W. F., and Cherniack, Nathan. Measuring the melon market. A preliminary report. U. S. Dept. of agriculture, Bureau of agricultural economics, 1934. 24p. Mimeographed. 1.9 Ec 7Mm  
Port of New York Authority cooperating.  
"Daily price and carry-over and daily price and sales of watermelons at New York during summer of 1923. Correlation of absolute values." - Holbrook Working in Quarterly Journal of Economics, Aug. 1925, p.542.

Potatoes

102. Waugh, F. V. Factors influencing the price of New Jersey potatoes on the New York market. Trenton, 1923. 26p. (N.J. Dept. Agr. Circ. 66)  
"This study is not published with the idea that it can be used actually to determine whether existing prices are too high or too low, or to predict accurately the trend of prices for the season. It is intended as a study of certain factors which have influenced the price of potatoes, and by an analysis of these factors over a period of twenty-one years we can get an estimate of the influence they have had which will give us a basis for forming an opinion as to future prices ... Four of the most important factors have been isolated by this study, and the amount of influence of each factor has been calculated. These four factors are: 1. Production of potatoes in the United States. 2. Trend of potato production. 3. Changes in the general price level. 4. Changes in demand." - p.3-4.
103. Waugh, F. V. Forecasting prices of New Jersey white potatoes and sweet potatoes. Trenton, 1924. 18 p. (N. J. Dept. Agr. Circ. 78)  
"We have tried in this circular to present the subject of price forecasting in a simpler manner [than in Circular 66] with the one object in mind of making the subject clear, and of showing a method of forecasting which all farmers and dealers will be able to use ... What we have attempted to do is to study a few of these factors and find out the influence they have had on prices in past years. We then have incorporated these factors into formulas which give each factor its proper weight." - p.3-4.
104. Working, Holbrook. Factors affecting the price of Minnesota potatoes. University Farm, St. Paul, 1925. 40p. (Minn. Agr. Exp. Sta. Tech. bul. 29)  
"In the study of prices, as in the study of diseases, we have learned that careful scientific study discloses certain facts that we could not learn by ordinary observation. Many things are still to be learned, but for potatoes we already know just which are the most important factors that ordinarily affect the price, and for five of these factors it has been possible to get statistical measures and to estimate quite accurately what the effect of these factors will be under any given conditions.  
"Many of the conclusions to be described have already been set forth in a Technical bulletin published in 1922, but since then additional facts have been discovered which more completely explain the movements of the price of potatoes." - Introduction.



105. Working, Holbrook. Factors determining the price of potatoes in St. Paul and Minneapolis. University Farm, St. Paul, 1922. 4lp. (Minn. Agr. Exp. Sta. Tech. Bul. 10)

"Economists will be especially interested in the first four sections following the 'Summary' (p.4-15) and in the discussion of the factors which do and do not measurably influence price." - Foreword.

106. Working, Holbrook. Factors influencing price differentials between potato markets. (In Journal of Farm Economics, v.7, no.4, Oct.1925, p.377-398) 280.8 J822

"The question of the factors influencing the price differentials between markets derives its chief interest from its bearing upon the problem of explaining and forecasting prices of specific commodities in individual markets. The present study is the outgrowth of such an investigation of the price of potatoes in St. Paul and Minneapolis. But the study of these price differentials for particular commodities and markets involves certain problems which are common to similar studies for all commodities and still more problems common to the study of differentials between various markets for the same commodity. Accordingly it seems worth while to present the results of the present study as a contribution to the general subject of price differentials between markets." - p.377.

#### Sugar

- 106a. Schultz, Henry. The statistical law of demand as illustrated by the demand for sugar. (In Journal of Political Economy, v.33, no.5,6, Oct., Dec. 1925, p.481-504, 577-637)

Bibliographical footnotes.

Appendix I, p.632-633: Comments on Professor Lehfeldt's Method of Deriving the Elasticity of Demand for Wheat.

#### Wool

107. Coyle, E. S. Analyzing the price of wool and of wool goods. (In National Association of wool manufacturers. Bul. v.55, no.1, Jan.1925, p.20-30) 45.9 N21B

"The charts in this study were reproduced by courtesy of the Harvard University, Committee on Economic Research, Professor Charles J. Bullock, chairman."

#### Market Structure

108. Boyle, J. E. Speculation and the Chicago Board of trade, N.Y., Macmillan co., 1920. 27p. 284 B71

"Reference library for a board of trade": p.265-269.

"This book is really 'a report' on the Chicago Board of Trade, and particularly on the two big problems involved there, namely, future trading and speculation." - Introductory.

109. Brace, H. E. The value of organized speculation. Boston and N.Y., Houghton Mifflin co., 1913. 290p. 284 B72

Chapters 2 and 3, The effect upon prices, p.50-140.

110. Butler, R. S. Marketing methods. N. Y., Alexander Hamilton institute, 1917. 346p. (Modern business...Alexander Hamilton institute [v.5]) L. C. For Prices consult the index.
111. Camp, W. R. The organization of agriculture in relation to the problem of price stabilization. (In Journal of Political Economy, v.32, no.3, June 1924, p.282-314; No.4, Aug.1924, p.441-467) 280.8 J82  
"The questions which will be mainly considered in this paper are: To what extent are the methods of marketing farm products and of financing agriculture, particularly as followed by producers' organizations, factors in determining the rate of change of prices of farm products and how far may the present movement for the organization of the producers of farm products be considered as one of the essential elements in the stabilization of prices in general and a factor in the stabilization of living expenses, wages and of industrial costs in general." - p.282.
112. Converse, P. D. Marketing methods and policies. N.Y., Prentice-Hall, 1921. 650p. 280.3 C76  
Bibliographies at ends of most chapters.  
Chapter 8, Organized produce exchanges and the question of speculation, p. 187-214.  
Chapter 19, Market analysis, p.488-513.  
Chapter 21, Price determining factors, p. 542-561.
113. Duncan, C. S. Marketing; its problems and methods. N.Y., D. Appleton and co., 1920. 500 p. 280.3 D91  
"Readings at ends of chapters."  
The book is in two parts. Part I deals with raw materials and foodstuffs, and part II with manufactured products. There is a detailed table of contents in addition to the index, which is very useful.
114. Emery, W. C. Speculation on the stock and produce exchanges of the United States. N.Y., 1896. 230p. (Columbia university. Faculty of political science. Studies in history, economics and public law, v.7, no.2) 284 Em5  
Chapter IV, The economic function of speculation, p.96-170. (Speculation and prices, p.113-142)
115. Great Britain. Ministry of agriculture and fisheries. Departmental committee on distribution and prices of agricultural produce. Interim and final reports. London, H.M. Stationery off., 1924. 5v. in 1. 280.3 G793A  
The report of a committee appointed "to enquire into the methods and costs of selling and distributing agricultural, horticultural, and dairy produce in Great Britain, and to consider whether, and if so, by what means, the disparity between the price received by the producer and that paid by the consumer can be diminished."  
There is no index to the complete volume, but each separate part, or volume, has its own index.  
V.1, deals with milk and milk products; v.2, with fruit and vegetables; v.3, with meat, poultry and eggs; v.4, with cereals, flour and bread; and v.5 is the final report.



116. McFall, R. J. The higher cost of food in Massachusetts. (In American statistical association. Journal, v.19, n.s., no.147, Sept. 1924, p.362-377) 251 Am3  
"The results of this study show that there is truth in the claim that the general level of the retail price of food is higher in Massachusetts than in other parts of the country, that the chief cause of these higher prices lies somewhere in the local marketing systems and that the best probable corrective is improvement of the marketing machinery which distributes the food after it has arrived in the industrial centers of the States." - p.362.
117. McMath, J. C. Speculation and gambling in options, futures and stocks in Illinois ... law procedure, history, economics, law and brokers, Illinois laws; cases, references to legal periodicals, etc. in the appendix. Chicago, G. I. Jones, 1921. 70 p. 284 M22  
"This book is published with the hope and expectation that it will be of service to lawyers in the preparation and trial of cases in which the validity or invalidity of transactions in grain 'futures' and stocks are in question."
118. Nourse, E. G. The Chicago produce market. Boston and N. Y., Houghton Mifflin co., 1918. 304p. (Hart, Schaffner & Marx prize essays, XXV) 280.3 N86  
"The present study is undertaken as a modest venture in this latter field of marketing investigation [detailed studies of some particular phase of the larger problem of marketing] limiting itself both in size of market area and range of commodities discussed. It aims, by the careful examination of a selected problem of limited scope, to derive some understanding of the principles involved and of the part played by a particular market mechanism in determining the prices of certain agricultural products." - Introduction.  
The effect of the market system upon prices: p.107-158.  
Bibliography: p.293-295.
119. U. S. Federal trade commission. Food investigation. Report...on the whole-sale marketing of food. June 30, 1919; Washington, 1920. 268p. 173 F32Rw  
Chapter headings are: Urgency of the food problem and its proposed solution; Present organization of the wholesale marketing system; Conditions in the wholesale marketing of produce which make for losses; and Methods of handling wholesale food problem.  
Exhibits cover a survey of New York produce marketing conditions, a brief survey of several representative markets, and the wholesale marketing of perishable foods in foreign countries.
120. U. S. Industrial commission. Report ... on the distribution of farm products. Washington, 1901. 508p. (Its Reports, v.6) 173 In2Re  
"Special report on speculation and prices of wheat and cotton," prepared by N.I. Stone, statistician of the Bureau of Economic Research, New York: p.189-224.  
For other material on prices consult the index.

121. Usher, A. I. Influence of speculative marketing upon prices. (In American Economic Review, v.6, no.1. March. 1916, p.49-60) 280.8 Am32  
Bibliographical footnotes.

122. Waite, T. C. Market price analysis. (In Journal of Farm Economics, v.6, no.4, Oct. 1924, p.351-359) 280.8 J822  
"The major problem in market price analysis is the adaptation of general price theory to actual market conditions ... With a view to discovering the general method of attack upon the problem, a preliminary study was made of three of the central markets for agricultural products in Minneapolis and St. Paul." - p.352.

123. White, Percival. Market analysis, its principles and methods. 2d ed. N. Y. McGraw-Hill book co., inc., 1925. 438p. 280.3 W58  
"This book is offered more to those who are entering the field than to those who are themselves making history in it. This edition is presented in the hope that the suggestions obtainable from it will more than make up for the deficiencies which must necessarily be present in any work dealing with so new an art." - Preface to the second edition.  
For information on Price consult the index.

#### Citrus fruits

124. McKay, A. W., and Stevens, W. H. Operating methods and expense of cooperative citrus fruit marketing agencies. Washington, 1924, 35p. (U. S. Dept. Agr. Bul. 1261)  
"This bulletin describes the operating methods of the local associations and discusses the factors which enter into the expense connected with the preparation of citrus fruit for market." - p.1.

#### Cotton

125. Taylor, Fred. Relation between primary market prices and qualities of cotton. 1916. 13p. (U. S. Dept. Agr. Bul. 457)  
In this survey covering the entire cotton belt conducted "for the purpose of ascertaining the manner in which cotton is handled and marketed in the various sections of the south ... special effort was made to determine whether staple was a factor in pricing the farmer's cotton or whether cotton was sold without regard to variations in length of staple."

126. U. S. Bureau of corporations. Report of the commissioner ... on cotton exchanges. Washington, 1908-1909. 3v. 157.49 C82  
"Preceding portions of this report [v.1-2] have dealt almost exclusively with the character of future contracts on cotton exchanges; they have been concerned chiefly with the effect of special characteristics of such contracts upon the future market itself and upon the use of that market by cotton merchants. This portion of the report is largely devoted to a discussion of the effects of such special characteristics of future contracts upon prices of actual cotton, and particularly upon prices paid



producers. There is also presented some further discussion of their effect upon cotton merchants ... A very brief discussion of the general influences of speculation, has however, been presented, chiefly for the purpose of dealing with certain misconceptions of the nature and effects of future trading." - p.1. of volume 3.

### Cranberries

127. Hobson, Asher, and Chaney, J. B. Sales methods and policies of a growers' national marketing agency. A study of the organization and achievements of twenty-six years of cooperative marketing by part of the cranberry growers of the United States. Washington, 1923. 35p. (U. S. Dept. Agr. Bul. 1109)
- "The marketing methods of the cranberry growers have been analyzed in detail in the hope that this analysis may furnish suggestions that will be helpful in the marketing of other farm products." - p.1.
- "Prices are as dependent upon conditions influencing demand as they are upon the factors of supply... It can be said without hesitation that the price received for cranberries is dependent in no small measure upon the demand of the consuming public." - p.24.

### Farm implements

128. U. S. Federal trade commission. Report ... on the causes of high prices of farm implements. Washington, 1920. 713p. 173 F32Ch
- "This report is made in response to the resolution of the Senate directing the Commission to report the causes for the high prices of farm implements including any facts relating to restraints of trade or unfair methods of competition in the industry and whether by reason of such prices the farmers have been prevented from making fair profits. This inquiry involved, therefore, a determination of the costs, prices and profits of implement manufacturers, the prices and unfair methods of competition among manufacturers or dealers, and the situation of the farmer with respect to the prices paid for implements and his general economic position." - p.29.

### Gasoline

129. Haney, L. H. Gasoline prices as affected by interlocking stockownership and joint cost. (In Quarterly Journal of Economics, v.31, no.4, Aug. 1917, p.635-655) 280.8 Q2
- Based on the U. S. Federal Trade Commission's Report on Gasoline Prices in 1915. (Washington, 1917)
130. U. S. Fuel administration. Oil division. Prices and marketing practices covering the distribution of gasoline and kerosene throughout the United States, by A. G. Maguire. Washington, 1919. 24p. 164.61 P93
- "The purpose of this report is to present for consideration and discussion the results obtained by the investigations of the Oil Div. of the United States Fuel Administration with respect to trade policies prevalent in the distributing and marketing of gasoline and kerosene. The report discusses

the failure of the dissolution of the Standard Oil Co. of New Jersey to give desirable results in certain directions; describes the wide variance in marketing practices among the various districts of the country, with the recommendation that these be made uniform; and points out the variations in prices in the various districts, suggesting a method of fixing uniformly graded prices on the basis of the price of gasoline at a nuclear point in Oklahoma." - Foreword.

Grain

131. Smith, R. E. Speculation and the price of wheat. (Ballston, Va.) 1923. 63p. 284 Sm6s  
"This booklet is the outcome of the author's own observations and experiences in the grain markets, extending over a period of twenty-five years." - Introduction.  
Chapter XVI is Speculation vs Supply and Demand - What is the Force That Moves Prices Up and Down?
132. U. S. Congress. House. Committee on rules. Grain exchanges. Hearings ... on H. Res. 424. March 3-7, 1914. Washington, 1914. 429p. 284 Un342  
"An investigation of the charge that the price of wheat paid the farmers and the cost of flour to the consumers is largely controlled by the Board of Trade of Chicago, the Chamber of Commerce of Minneapolis, and the Board of Trade of Duluth, acting in combination."
133. U. S. Federal trade commission. Report ... on the grain trade. Washington, 1920-1924. 6v. 173 F32Rg  
Volume VI, Prices of Grain and Grain Futures "deals with the prices of cash grain and grain futures as related to various factors of supply and demand, and especially with the functioning of futures markets in relation to the needs of the grain trade and of the general public." - p.XIX.
134. Wilson, Sir James. The world's wheat. (In Royal statistical society. Journal, n.s., v.84, pt.3, May, 1921, p.329-391) 251 R81J  
"Gives a brief description of methods of crop reporting, collection of statistics of exports and imports, and the making of forecasts and final estimates, approved by the International Institute of Agriculture together with a discussion of statistics of wheat production, trade and consumption in important countries through periods of years. Considerable discussion is contributed by R. H. Rew, Lord Bledisloe and others." Experiment Station Record, v.46, p.391.  
There is also a reprint of this article. 59 W692W  
There are articles of similar titles for 1915, 1917-1923, 1925.

Livestock

135. U. S. Federal trade commission. Southern livestock prices. Washington, 1920. 11p. (U. S. 66th Cong. 2d sess. Senate Doc.209) Pam. Coll.  
"Report on an examination of southern livestock prices and marketing conditions."



Meat

136. Marshall, U. C. Retail marketing of meats. Agencies of distribution, methods of merchandising and operating expenses and profits. Washington, 1925. 86p. (U. S. Dept. Agr. Bul.1317)

Cycles

Business cycles

137. Adams, A. B. Economics of business cycles. 1st ed. N.Y., McGraw-Hill book co., inc., 1925. 268p. 280 Ad1  
"The contribution which this work makes to the advancement of our knowledge concerning business cycles is its analysis of the causes and effects of the cycle forces. The major part of the book consists of an analytical study of the causes which produce the different changes in business trends and of how these forces may be controlled so as to eliminate violent fluctuations. The work is an analytical rather than an empirical study; however the empiric knowledge heretofore gained is used as a basis for the analytical investigation herein made." - Preface, p.VIII.
138. Bellerby, J. R. The controlling factor in trade cycles. (In Economic Journal, v.33, Sept. 1923, p.305-331) 280.8 Ec72
139. Clark, J. M. Business acceleration and the law of demand; a technical factor in economic cycles. (In Journal of Political Economy, v.25, no.3, March, 1917, p.217-235) 280.8 J82
140. Frank, L. K. A theory of business cycles. (In Journal of Farm Economics, v.37, no.4, Aug. 1923, p.625-642) 280.8 J822  
"The problem of business cycles, as seen by the writer, is to account for the recurrent fluctuations in the magnitude of economic activities or behavior, and of their pecuniary or credit concomitants. The purpose of this paper is to outline in brief form a theory, or tentative hypothesis, which may further the investigation of that problem." - p.625.
141. Hansen, A. E. Cycles of prosperity and depression in the United States, Great Britain and Germany; a study of monthly data 1902-1908. Madison, 1921. 112p. (Wisconsin. University. Studies in the social sciences and history no.5) 280 F192  
Bibliography: p.111-112.  
"This book attempts two things, which so far as the writer knows, are relatively new in this field: first, a detailed analysis of monthly data for a single cycle of prosperity and depression; second, a comparative analysis of monthly data in the three great industrial nations of the world, the United States, Great Britain and Germany." - p.8-9.
142. Hansen, A. H. Prime costs in the business cycle. (In Journal of Political Economy, v.32, no.1, Feb. 1924, p.1-14) 280.8 J82

143. Harvard University. Committee on economic research. The economic cycle; its application to buying, selling, production, investments, by Fred Y. Fresley. (Cambridge, 1925) 32p. 280 H26E  
"It is the purpose of this study to present in simple, direct, concrete form adequate evidence of the existence of the cycle and to point out its practical application to current problems of major importance in the fields of business and finance. The material upon which this discussion is based has been drawn largely from the work of the Harvard University Committee on Economic Research." - Foreword.
144. Hastings, H. B. Costs and profits: their relation to business cycles. Boston and N.Y., Houghton Mifflin co., 1923. 168p. (Pollak foundation for economic research. Publication no.3) 280 H27
145. King, B. W. A study of Mitchell's inquiries into prices. (In Quarterly Journal of Economics, v.31, no.4, Aug. 1917, p.656-673) 280.8 Q2  
"It is ...[the] subjective method which the present paper considers and tests. No endeavor is here made to present additional data, or to revise in any way the material so admirably presented by Mitchell. The purpose is simply to introduce more objective methods of testing the validity of his conclusions." - P.657.
146. Mitchell, W. C. Business cycles. Berkeley, University of California press, 1913. 610p. (Memoirs of the University of California, v.3) L. C.  
"This book offers an analytic description of the complicated processes by which seasons of business prosperity, crisis, depression, and revival come about in the modern world. The materials used consist chiefly of market reports and statistics concerning the business cycles which have run their course since 1890 in the United States, England, Germany and France." - Preface.
147. Mitchell, W. C. The crisis of 1920 and the problem of controlling business cycles. (In American Economic Review, v.12, no.1, Sup, Mar.1922, p.20-32) 280.8 Am32  
This is followed by discussion: p.33-43.
148. Moore, H. L. Economic cycles; their law and cause. N. Y., Macmillan co., 1914. 149p. 280 M78  
"In this volume Professor Moore again makes use of his characteristic method, developed in his earlier volume on Laws of Wages. The method, in brief is to derive economic laws inductively from statistics by means of the modern refined methods of calculus of probabilities. The specific problem in the present instance is to derive the law of business cycles of expansion and depression from data as to rainfall, crops and prices."  
From a review by Philip G. Wright in the Quarterly Journal of Economics, v.29, no.3, May, 1915, p.631-641.



149. Persons, W. M., and Coyle, E. S. A commodity price index of business cycles. (In Review of Economic Statistics, preliminary volume 3, no.11, Nov. 1921, p.353-369) 251.8 R32  
"The object of this study is to construct an index of wholesale commodity prices for a special purpose ... The price index of business cycles, which we present here, is a new type of index number constructed by methods adapted to the special object in view ... Not only does our price index register emphatically the cycles of general commodity prices, but it also gives us an accurate record of the fluctuations of business and industry in general, exclusive of agriculture." - p.353.
150. Schluter, W. C. The pre-war business cycle, 1907 to 1914. New York, 1923. 191p. 280 Sch3  
Thesis (Ph.D.) - Columbia university, 1923.  
"The specific problem of this treatise is the discovery of the causes of the business depressions of 1910-11 and 1913. The last chapter however is devoted to an explanation of the varying lengths of business cycles, which we offer, based on the data and analyses in preceding chapters together with historical corroboration." - Preface.
151. Vance, Ray. Business and investment forecasting: forecasting methods and their application in practical use. N.Y., Brookmire economic service, inc., 1922. 132p. 280 V27  
The author writes in the Preface that this book has been written for the active business man, or investor, and students. "However, in each case which has presented a conflict between the interests of the practical user of statistics, and those of the theoretical investigator, preference has been given to the needs of the former. This has had the following results: 1. Attention has been concentrated upon the use of statistical barometers rather than upon their preparation. 2. All attempts to cover detailed mathematical formulae have been omitted. 3. Considerable space has been spent upon discussing the general economic principles that underlie the construction of business barometers, as distinguished from the purely mathematical operation of their actual construction. 4. From the students' viewpoint a disproportionately large amount of space has been given to the forming of policies after we assume that an accurate forecast has been made."
152. Williams, J. H. The role of prices in the business cycle. (In Review of Economic Statistics. Preliminary volume I, p.206-210. Harvard university press, 1919) 251.8 R32  
Bibliographical footnotes.

Generating cycles

153. Beveridge, Sir W. H. British exports and the barometer. (In Economic Journal, v.30, Mar.1920, p.13-25; June, 1920, p.209-213) 280.8 Ec72  
In the March, 1920, issue of the Economic Journal "I called attention to certain regular fluctuations discoverable in the statistics of British exports and their apparent connection with variations of barometric pressure and harvests. I have now obtained further evidence which seems to support very strongly the hypothesis then advanced - of a periodic crisis

in the climatic conditions of the earth as a whole which, at intervals averaging about 15 1/3 years, lowers the general productivity of harvests during one or more seasons. This evidence consists of (1) an analysis of the course of food prices in relation to other prices from 1782 to 1913; (2) more comprehensive barometric records; (3) investigation of the course of grain prices and other evidences of dearth before 1782. I cannot deal here with the last of these, but am glad to ... supplement my previous article by two tables and a brief explanation on the first two points."- p.209.

See also the critical article, Weather and Cyclical Fluctuations, by T. H. Bryant in the Economic Journal, v.31, Mar. 1921, p.46-49.

154. Beveridge, Sir W. H. Weather and harvest cycles. (In Economic Journal, v.31, no.134, Dec. 1921, p.429-452) 280.8 Ec72

"I have now collected more information as to corn prices and submit this as a further step in the investigation of weather periodicities."

155. Beveridge, Sir W. H. Wheat prices and rainfall in western Europe. (In Royal statistical society. Journal, v.85, pt.3, May, 1922, p.412-477) 251 R81J

This paper which is followed by discussion is "in substance a sequel and supplement to an article 'Weather and harvest cycles', published in the Economic Journal of December, 1921."

Discussion: p.460-478.

156. Moore, H. L. Crop-cycles in the United Kingdom and in the United States. (In Royal statistical society. Journal, v.82, pt.3, May, 1919, p.373-389) 251 R21J

"The results which are about to be described are intended to furnish evidence that the yield of the leading cereal crops in the United Kingdom tends to vary in well-defined cycles, and that as far as the statistics of the two countries are comparable, the crop-cycles in the United States tend to synchronize with those of the United Kingdom." - p.373.

157. Moore, H. L. Generating cycles reflected in a century of prices. (In Quarterly Journal of Economics, v.35, no.4, Aug. 1921, p.503-523) 280.8 Q2

"An analysis is made of the history of prices in Great Britain, for a century, and the results are considered with reference to their dependence upon generating agricultural cycles and with regard to their bearing upon the economic theory of cycles." - p.504.

158. Moore, H. L. Generating cycles of products and prices. (In Quarterly Journal of Economics, v.35, no.2, Feb. 1921, p.215-239) 280.8 Q2

"The major features of economic cycles are traceable to three primary laws: (1) the law of the generating cycle of raw materials, which is due to a non-economic cause; (2) the law of demand for raw materials, in consequence of which the generating cycle of products originates a derived cycle of prices for raw materials; and (3) the law of competitive price, according to which the prices of finished goods in an open market tend to correspond with the cost of production." -p215.

Commodities discussed are corn, wheat, oats, potatoes, hay, cotton, coal and iron.



159. Moore, H. L. Generating economic cycles. N.Y., Macmillan co., 1923.  
141p. 280 M78G

"The primary purpose of this Essay is to show that a known natural cause originates an agricultural cycle which in turn generates other economic cycles." - p.11.

Excluding the introductory chapter, the titles of the chapters are: Generating cycles of products and prices; Generating cycles reflected in a century of prices; The origin of the eight-year generating cycle; and The eight-year generating cycle in relation to its physical cause.

Statistical Method

160. Adams, O. S. Geodesy - Application of the theory of least squares to the adjustment of triangulation. 1915. 220p. (U. S. Coast and geodetic survey. Spec. pub. 28) 157.44 Sp3

"The aim has not been to develop the theory of least squares, but to illustrate the application of the method to the problems arising in the adjustment of triangulation." - p.7.

161. Crum, W. L. The determination of secular trend. (In American statistical association. Journal, v.18, n.s., 138 June, 1922, p.210-215) 251 Am3

"It is customary in the analysis of ordered statistical series of the historical economic sort to eliminate the growth factor, assumed constant, by fitting a straight line to the original data. The equation of this straight line is determined by the method of least squares or by an equivalent process. At a later stage in the investigation, it is frequently desirable to consider the ratio of the deviation of a particular variate from the ordinate of the corresponding point on the line of secular trend to that ordinate, rather than the actual deviation itself. The question arises whether it would not be preferable to fit the line so that the sum of the squares of these ratios, rather than the sum of the squares of the actual deviations, is minimum. It is the purpose of this paper to examine this question and to get a first approximation to the position of the line of secular trend on the new basis." - p.210.

162. Crum, W. L. The least squares criterion for trend lines. (In American statistical association. Journal, v.20, n.s. 150, June, 1925, p.211-222) 251 Am3

"A full realization of the inevitable limitations of certain statistical methods as applied to the analysis of time series, and a healthy fear of putting undue faith in simple processes which do not admit of thorough theoretical justification - these will help the statistical worker to firmer footing." - p.222.

163. Crum, W. L. The use of the median in determining seasonal variation. (In American statistical association. Journal, v.18, n.s. 141, Mar., 1923, p.607-614) 251 Am3

Bibliographical footnotes.

"It is the object of this paper to examine the form of the distribution of the series of link-relatives of a particular economic sequence, and to discuss in the light of this examination the relative advantages of the median and the mean." - p.607.

164. Ezekiel, Mordecai. The assumptions implied in the multiple regression equation. (In American statistical association. Journal, v. 19, n.s.151, Sept., 1925, p.405-408) 251 Am3  
"In Simple correlation we are concerned with the relation between two variables, and ordinarily do not stop to consider whether the relationship is such that one factor varies absolutely or proportionately with the other ... When multiple correlation is used, however, clear analysis of the type of the relationship is vital if the very form of the equation is not to imply assumptions we have no intention of making." - p.405.
165. Ezekiel, Mordecai. A method of handling curvilinear correlation for any number of variables. (In American statistical association. Journal, v.19,n.s. 148, Dec. 1924, p.431-453) 251 Am3  
Bibliographical footnotes.
166. Falkner, H. D. The measurement of seasonal variation. (In American statistical association. Journal, v.19,n.s.146, June, 1924, p.167-179) 251 Am3  
Bibliographical footnotes.  
"The present section describes a scheme for measuring seasonal variation which makes allowance for the effects of other types of fluctuation without involving excessively laborious computations."- p.171.
167. Frickey, Edwin. The line of secular trend. (In Review of Economic Statistics, Preliminary volume I, p.210-211. Harvard University press, 1919)  
251 R 332  
The author "has worked out the ... derivation and explanation of the slope of the line of secular trend."
168. Gressens, C. On the measurement of seasonal variation. (In American statistical association. Journal, v.20, n.s. 150, June, 1925, p.203-210)  
251 Am3
169. Harris, J. The correlation between a component, and between the sum of two or more components, and the sum of the remaining components of a variable (In American statistical association. Journal, v.15, n.s. 120, Dec.1917, p.254-259) 251 Am3
170. Hooker, R. W. Correlation of marriage-rate with trade. (In Royal statistical Society. Journal, v.64, pt.3, Sept.1901, p.485-492) 251 R81J  
"Read before the Economics and Statistics Section of the British Association, held at Glasgow, September, 1901."  
"What I wish to suggest here ... is an elementary method of eliminating the general movement in the particular case - which is of frequent occurrence - of phenomena exhibiting similar regular periodic movements, so as to enable us to correlate the oscillations ..."  
"As an example of the use to be made of this method, I selected the set of figures which the Registrar-General quotes at the commencement of his annual reports for comparison with the movement of the marriage-rate. These are, (1) the exports of British and Irish produce; (2) the imports and (3) the total trade, of the United Kingdom; (4) the amount cleared at the Bankers' Clearing House; and (5) the average Gazette price of wheat. The first four are all per head of the population (of the United Kingdom). The marriage rate was in earlier times influenced by the price



of wheat, but for many years this has been no longer the case. I propose, therefore, to verify this, and also to see whether correlation would not tell us with which of these data the marriage-rate is most intimately connected." - p.486.

171. Hooker, R. H. On the correlation of successive observations; illustrated by corn prices. (In Royal statistical society. Journal, v.68,pt.4, Dec. 1905, p.696-703) 251 R81J

"I ... desire to direct attention to a method of a very simple character, applicable whether the smaller rapid changes under investigation are of a quasi-periodic character or not. The method will probably be found most serviceable in economic inquiries, as in the illustrations that follow; but it appears to be equally applicable in other branches of science where time is involved. It consists simply in calculating the correlation coefficients of the differences between successive values of the two variables, instead of the differences from the arithmetic means." - p.697.

172. Hooker, R. H. The suspension of the Berlin produce exchange and its effect upon corn prices. (In Royal statistical society. Journal, v.64, pt.4, Dec. 1901, p.574-613) 251 R81J

Pages 605-613 consist of discussion on this paper.

The author writes in his introductory paragraphs that the main conclusions of the investigation which he submits are embodied in the report of a Committee appointed by the Economic Science and Statistics Section of the British Association, in 1896, to investigate the subject of "Future Dealings in Raw Produce"; that the deductions in that report are stated in the briefest possible manner; and that as an "examination of the material on which these deductions rest, and more especially of the methods in which we dealt with the numerous little statistical problems encountered at every turn, is worthy of being set forth in some detail," he proposes "to point out the various tests which had to be applied at every step before we could feel assured of the solidity of the ground we were treading upon". He further adds, "I nearly yielded to the temptation to entitle this paper 'An exercise in handling statistical material.'"

173. International labour office. Economic barometers. Geneva, 1924. 56p. (Its Studies and reports. ser.N (Statistics) no.5) 284 In83E

"Report submitted to the Economic committee of the League of nations."

"As this Report forms an objective study of the methods by which economic fluctuations are regularly observed in certain countries with a view to foreseeing industrial unemployment and is a contribution to the special study of the problem of the crises of unemployment ... it is thought desirable to publish it for the benefit of a wider circle of readers." -  
Introductory note.

174. Jevons, W. A. On the variations of prices and the value of currency since 1782. (In Royal statistical society. Journal, v.23, pt.2, June, 1865, p.294-320, and 4 supplementary pages) 251 R81J

"The results which I wish to state in this paper were obtained by applying more extensively the method of investigation employed in a pamphlet on the 'Value of Gold' published by me about two years ago." - P.294.

175. King, W. I. The correlation of historical economic variables and the misuse of coefficients in this connection. (In American statistical association. Journal, v.15, n.s. 120. Dec. 1917, p.847-853) 251 Am3
176. King, W. I. An improved method for measuring the seasonal factor. (In American statistical association. Journal, v.19, n.s. 147, Sept.1924, p.301-313) 251 Am3
177. King, W. I. Principles underlying the isolation of cycles and trends. (In American statistical association. Journal, v.19, n.s., 148, Dec.1924, p.468-475) 251 Am3
178. Langman, Harry. An interpolation formula for "equidistant" frequency distributions. (In American statistical association. Journal, v.15, n.s. 118, June, 1917, p.685-692) 251 Am3
179. Lehfeldt, R. A. The elasticity of demand for wheat. (In Economic Journal, v.24, June, 1914, p.212-217) 280.8 Ec72  
"It would seem ... that the roughest attempt to measure a coefficient of elasticity would be better than none, and would serve to make the concept of more real use. The following is a first attempt at measuring the elasticity of demand for wheat." p.212.
180. Lipka, Joseph. Graphical and mechanical computation. N.Y., J. Wiley & Sons, inc., 1918. 264p. 325 L66  
"Contains a treatment of the method of least squares and methods of curve fitting." - U. S. Dept. Agr. Bul. 1351, p.39.  
Not seen.
181. Mills, F. C. The measurement of correlation and the problem of estimation. (In American statistical association. Journal, v.19, n.s. 147, Sept.1924, p.273-300) 251 Am3
182. Moore, H. L. Elasticity of demand and flexibility of prices. (In American statistical association. Journal, v.18, n.s. 137, Mar.1922, p.8-19) 251 Am3  
"Farm price Dec. 1 and production in U. S. of potatoes. Percentage deviations from secular trend correlated and a demand curve fitted of such form as to give flexibility of price a linear function of price." - Holbrook Working in Quarterly Journal of Economics, August, 1925, p.540.  
Not seen.
183. Moore, H. L. Empirical laws of demand and supply and the flexibility of prices. (In Political Science Quarterly, v.34, no.4, Dec. 1919, p. 546-567) 280.8 F75
184. Moore, H. L. Forecasting the yield and price of cotton. N.Y., Macmillan co., 1917. 173p. 72 M78  
"The statistical devices used in the treatment of our problem of forecasting prices were, for the most part, invented for another purpose, by Professor Karl Pearson and rest upon the theory of probabilities." - Introduction.



185. Persons, W. M. Correlation of economic statistics. (In American statistical association. Journal, v.12, n.s. 92, Dec. 1910, p.287-322)  
251 Am3  
"Economics deals mainly with correlation rather than with simple causation (p.287); necessity of a method of measuring the correspondence between two series of statistics (p.288); illustrations of the use of the graphic method (p.290); the coefficient of correlation defined and illustrated (p.298); the coefficient of correlation as a measure of the grouping of points about the line of regression (p.303); the equation of the line of regression (p.303); the coefficients of correlation computed for the illustrations cited above (p.306); two influences affect the size of the coefficient of correlation, i.e. short-time fluctuations and secular tendency (p.306); three methods of isolating the two influences are described and illustrated (p.310); the measurement of the correlation among three variables (p.319); conclusion (p.322)" - From a summary at the beginning of the article.
186. Persons, W. M. Correlation of time series. (In American statistical association. Journal, v.18, n.s. 142, June, 1923, p.713-726) 251 Am3
187. Persons, W. M. On the variate difference correlation method and curve-fitting. (In American statistical association. Journal, v.15, n.s. 118, June, 1917, p.602-642) 251 Am3
188. Persons, W. M. Foster, W. T., and Hettinger, A. J., jr. ed. The problem of business forecasting. Papers presented at the eighty-fifth annual meeting of the American statistical association, Washington, D. C., December 27-29, 1923. Boston and N.Y., Houghton Mifflin co., 1924. 317p. 280 P432  
The book's central theme is the statistical basis for analyzing current economic conditions for the purpose of making forecasts of business activities. In the various chapters specialists deal with such problems as those involved in predicting cotton crops, metal prices, corn-hog ratios, demand for lumber, freight-car loadings, foreign trade and automobile production. These problems and all the others discussed in this book are not academic: they are part and parcel of industry and trade."- Prefatory note.
189. Phillips, F. M. Short method of obtaining a Pearson coefficient of correlation and other short statistical processes. (In U. S. Dept. Agr. Monthly Weather Review, v.50, no.3, Mar.1922, P.135-136) 1 W37M
190. Reed, W. G. The coefficient of correlation. (In American statistical association. Journal, v.15, n.s. 118, June, 1917 p.670-684)  
"Literature": p.681-684.
191. Smith, B. B. The error in eliminating secular trend and seasonal variation before correlating time series. (In American statistical association. Journal, v.20, n.s. 152, Dec. 1925. p.543-545) 251 Am3

192. Smith, B. B. The use of punched card tabulating equipment in multiple correlation problems; collected and prepared for the use of statisticians of the Bureau of agricultural economics, 1923. 24 p. Mimeographed. 1.9 Ec7U3
193. Tolley, H. R., and Ezekiel, Mordecai. A method of handling multiple correlation problems. (In American statistical association. Journal, v.18, n.s. 144, Dec. 1923, p.993-1003) 251 Am3 Bibliographical footnotes.  
"This paper presents a method of computing the coefficients of net partial regression and net partial correlation and the coefficient of multiple correlation which much shortens the necessary arithmetic work."
194. U. S. Bureau of labor statistics. Methods of procuring and computing statistical information of the Bureau of labor statistics. Washington, 1923. (Its Bul. 326) 158.6 B87
195. Westergaard, Harald. On periods in economic life. (In Metron, v.5, no.1, 1925, p.3-26)  
The author "first discusses movements within the calendar year, then maxima and minima which appear with a certain regularity with an interval of several years, and last the more irregular waves caused by special events such as the world war. He argues that all these movements have a tendency to conceal the regular progressive movement which generally take place in economic statistics. He thinks there should be a revision of methods from this point of view in dealing with economic statistics, particularly concerning the question of an economic meteorology." - From a review in The B. A. E. News, Library Supplement, no.30, Feb.23,1926,p.11.
196. Weld, LeR. D. Theory of errors and least squares: A textbook for college students and research workers. N.Y., Mcmillan co., 1916. 197p. 325 W45  
This book "is intended as a presentation of the Theory of Errors and Least Squares in such a simple and concise form as to be useful, not only as a textbook for undergraduates, but as a handy reference which any research worker can read through in an evening or so and then put into immediate practice." - Preface.
197. Working, Holbrook. The determination of secular trend reconsidered. (In American statistical association. Journal, v.18, n.s.140, Dec.1922,p.497-502) 251 Am3  
A criticism of Professor Cruas article, The Determination of Secular Trend, in the Journal of the American Statistical Association, June, 1922.
198. Working, Holbrook. The statistical determination of demand curves. (In Quarterly Journal of Economics, v.39, no.4, Aug. 1925,p.503-543)280.8 Q2  
Bibliography: p.539-543.

199. Yule, G. U. On the time-correlation problem, with especial reference to the variate-difference correlation method. (In Royal statistical society: Journal; v.84, pt.4, July, 1921, p.497-537) 251 R81J  
Pages 526-537 consist of discussion on this paper.  
References: p.526.  
"The problem of time-correlation is then, in my view, the problem of isolating, for the purpose of discussing the relations between them, oscillations of different durations - such oscillations being, in all probability, not strictly periodic but up-and-down movements of greater or less rapidity." - p.524.



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- No. 1. Agricultural economics; a selected list of references. Compiled by Mary G. Lacy, Librarian, Bureau of Agricultural Economics. January, 1925.
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