CHINA'S INDUSTRIES AND FINANCE

局刷印昌峰 *PRINTING BY* SHAO CHANG PRESS LTD.. TEL. NO. 1044 S. O. PEKING.

CHINA'S INDUSTRIES

AND

FINANCE

Being a Series of Studies in Chinese Industrial & Financial Questions

BY

D. K. LIEU (劉大鈞)

Chief of Investigation Department, Chinese Government Bureau of Economic Information; Technical Expert, Financial Readjustment Commission; Technical Expert, Chinese Delegation to the Special Customs Conference; Contributing Editor, Chinese Social and Political Science Review; sometime Fellow of British Royal Society of Arts; former Professor of Economics, Tsing Hua College.

> THE CHINESE GOVERNMENT BUREAU OF ECONOMIC INFORMATION

> > Nan Ho Yen, Pcking 20 Museum Road, Shanghai

All rights reserved by the author. Permission must be obtained before translating into other languages.



The author's father, Mr. Meng-hsiung Lieu. 像遺(熊孟諱)生先青味劉 (父之者著) To the memory of my father, who, in my childhood, taught me the rudiments of modern science and languages, and imparted to me an unquenchable thirst for knowledge, and to my mother, who gave me the opportunity of studying abroad, this book is respectfully and affectionately dedicated.

Foreword.

As I have written quite a number of articles on industrial and financial questions of China for various publications, I think it may be useful to put some of my research studies together, and publish them in book form, to furnish reference for those who are interested in these questions. The result of this is the present volume. Many of the earlier articles have been thoroughly revised, some practically rewritten, and a good deal of new data are added which have been collected by the Investigation Department of the Bureau of Economic Information under my charge during the last seven years. The twenty odd statistical tables which appear in different parts of the book are compiled from various official publications, and give the essential features of the original data in the most condensed form convenient for comparison and analysis. They may be said to constitute the principal industrial and financial statistics of China.

My thanks are due to Mr. W. H. Donald, Acting Director of the Bureau of Economic Information, Dr. Ta Chen, Chief Statistician of the same Bureau, and my wife for their valuable suggestions and help in reading the proofs.

D. K. Lieu.

Peking, China, August, 1927.

CONTENTS.

 ► I. The Industrial Development of China......
The industrial development—Chinese handicraft industry — The porcelain industry— Cottage industry—Modern factories—Flour mills—Railways and industrial development —Foreign trade and industrial development— Foreign trade and domestic demand—Effect of boycotts—Other factors promoting industrial development—Economic advantages of Shanghai—Obstacles to industrial development.

- II. The Financial Organization of China 35 The financial organization-Three characteristics-Importance of personal credit-Classification of financial institutions-Capital shares and labor shares-Development of modern Chinese banks-Special privileges of foreign banks-Co-operative credit - Pawnshops - Special institutions-Bankers' guilds and stock exchanges-Banking practice - Securities for loans - Merchandise as security-Chop loans-Chinese credit instruments-Remittance by drafts-Fixing rates-What pao means-Banks without capital-Where credit rules-Use for banks.
- III. Industrial and Financial Statistics of China ... 84 Industrial and financial statistics—Farming families and land acreage—Principal agricultural products—Live stock, poultry and fishery products — Number of trees planted and

acreage—Silk statistics—Number of factories —Number of factory laborers—Statistics of principal manufactured products—Estimated production of minerals in 1925—Mining area —Financial statistics—Chinese national budgets—China's national debt—Central Government revenues—Price index numbers—Index numbers of cost of living and wages—Statistics of the Bureau—Production statistics— Weights and measures—Hankow measures— Currency—Coppers and foreign currencies— Nomenclature—Quality and grade.

IV.

The Likin System and Its Effects on Industries and Finance 129 The likin system—More than seven hundred barriers-Likin or percentage tax-A confusion of nomenclature - No uniformity in system-The tax in Kiangsu-Railways as promoters of reform-The origin of tungchuan -From 3 to 25%-Chief defects of system-System and rates in different provinces-Sugar a luxury; silk a necessary-Half of revenue goes to collectors-Funeral processions and smugglers-Ad valorem vs. specific tax - Proposed reforms - Railway likin-Likin abolition and tariff increase—Chinese attitude towards the treaties-Method of collection most important.

V. International Administration and Financial Control of Chinese Railways International administration of Chinese railways—The proposal of the Committee on

154

PAGE

Χ.

PAGE

Foreign Affairs - Arguments of Minister Tsao Ju-lin against the proposal-The new proposal - The plans outlined - President Hsu's opinion - Memorial of Committee on Foreign Affairs to the President - Railways and foreign influence - Criticisms of the proposal-Mr. Jeme Tien-yu's objections -The Ta-Seng Banking Syndicate-Plan of organization-Mr. Ho's bill in the Senate-The secret memorandum of the British Chinese Corporation to the Paris Peace · Conference—The proposed International Board -Telegram of Mr. Yeh Kung-cho and Dr. Wang Chin-chun from Paris-Plan of Yeh and Wang-Unification of railway administration - The New Consortium - Railways reserved by Japan-Classification of railways -Mr. Mayer's plan for the distribution of the international staff-Mr. Baker's Plan A., International Railway Commission-Plan B., International Railway Company-Plan C., The Far Eastern Convention of 1919-Details for the execution of Plan C .-- Explanatory notes to Plan C.

VL The Iron and Steel Industry in China, Its Cost of Production
The industry—Cost of pig iron—The iron oreThe advantage of cheap labor—The question of depreciation—Raw materials ninety times the cost of direct labor—Large vs. small furnaces—Coke, the most expensive item—How transportation affects the cost of

197

production-Cost of steel a composite figure --Cost records of two months--Difficulty in determining cost of steel production-Comparison with cost of American steel products -Material and labor cost-General features concerning cost of iron and steel production.

VII. Development of Chinese Silk Weaving Industry 220 Development of the industry-Huchow, important silk-producing center-Crepe and brocaded silk-Honan and Shantung silk-Hangchow silk-"Sunset silk" and "fragrant cloud gauze"-Satin, brocade and tapestry-Nanking satins-Introduction of Jacquard looms.

PAGE

xii

INDEX TO STATISTICAL TABLES.

INDEX TO STATISTICAE TABELS.
PAGE
Cotton mill statistics, 1910-1925 14
Total trade of Tientsin, Hankow and Dairen,
1917-1925
Exportation of Chinese factory products, 1921-1925. 27
Foreign and Sino-foreign banks in China in 1926 . 48
Number of provinces reporting in 1912-1921 85
Farming families and land acreage, 1914-1921 . 86
Principal agricultural products, 1914-1921 . 87, 88
Live stock, poultry and fishery products, 1914-1921 89
Number of trees planted and acreage, 1914-1921 . 89
Silk statistics, 1914-1921
Number of factories using power, 1912-1920 91
Number of factory laborers by sex, 1912-1920 . 91
Number of factories by industries, 1912-1920 92
Number of laborers by industries, 1912-1920 93
Statistics of manufactured products, 1912-1921 92, 93
Estimated production of minerals in 1925 95
Mining area by mineral products, 1921 and 1924 . 96
Mining area by provinces, 1919 and 1921 97
Mineral production by provinces, 1925 98
Chinese national budgets, 1912, 1913, 1914, 1916,
1919 and 1925 100-103
China's national debt, 1916, 1922 and 1926 104
Central Government revenues, 1922-1924 105
Price index numbers in Shanghai, 1920-1927 107
Price index numbers in Canton, 1912-1925 108
Provisional Index number of cost of living in Shang-
hai, January, 1926-May, 1927 109
Peking wages and cost of living index numbers,
1900-1925
Population statistics, 1910 and 1923 112

PAGE
Republican census, 1916
Statistics of likin revenue, 1912-1919 129
Number of likin collectorates, by provinces 130
System and rates of likin in different provinces,
1915 and 1924 140, 141
Mileage of railways reserved by Japan 185
Mileage of railways to be handed over by Powers . 185
Table of distribution of international staff . .
Cost of pig iron, raw materials 200
Cost of pig iron, all items
Per ton cost at new and old furnaces compared . 205
Per ton cost at Works B
Cost at Works A. and B. compared 207
Cost items entering into steel production
Cost of steel analysed, in percentages 212
Diagram showing process of manufacturing steel
products
Cost of steel products compared with that of steel
ingots
Comparison with cost of American steel products . 215
Cost of steel products, analysed 216
Material and labor cost in detail