

**THE IMPACT OF ENVIRONMENTAL FORCES ON THE ILLINOIS
CENTRAL RAILROAD BETWEEN 1915 AND 1939:
A FINANCIAL STATEMENT PERSPECTIVE**

ABSTRACT

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The annual reports of the Illinois Central Railroad Company (IC) spanning the quarter-century period between 1915 and 1939 were analyzed to determine the environmental impact of major historical events in the early 1900's. This period witnessed two major unprecedented events in the history of the United States, World War I and the Great Depression. The period under analysis ends at the beginning of World War II – a time when railroading and business in general changed markedly.

Accounting history has been defined as “the study of the evolution in accounting thought, practices, and institutions in response to changes in the environment and societal needs.” However, there are often revolutionary as well as evolutionary changes in the environment. While history textbooks cover major events and their effects upon a country or region, the annual reports of corporations can reveal the impact of these events upon organizations and/or industries. According to Chatfield, “accountancy is a mirror of socioeconomic development and much can be learned about the daily life of ancient societies through their account books.” The purpose of this paper is to show that much can be learned about the effects of major historical events on an organization by studying its annual reports. The annual reports of the IC show how the environment impacted the railroad.

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A basic concept in historical research is the use of primary pieces of evidence to make generalizations or draw conclusions. Accounting historians may seek out old journals, ledgers, and other books of accounts. An often overlooked source of primary evidence is the annual report. The annual report of a corporation can be a rich source of information. Since annual reports are produced every year, they can be a source of information that spans decades. Whereas people typically think of annual reports as providing information about an individual company, these same reports can also be used to learn about the environment in which that company operated.

Accounting history has been defined as the study of the evolution in accounting thought, practices, and institutions in response to changes in the environment and societal needs (Flamholtz, 1980). However, there are often revolutionary as well as evolutionary changes in the environment. While history textbooks cover major events and their effects upon a country or region, the annual reports of corporations can reveal the impact of these events upon organizations and/or industries. According to Chatfield, accountancy is a mirror of socioeconomic development and much can be learned about the daily life of ancient societies through their account books (Chatfield, 1977). The purpose of this paper is to show that much can be learned about the effects of major historical events upon an organization by studying its annual reports. Annual reports contain financial statements, but may also include a letter from

the company president and notes to the financial statements, providing additional insights into the environment in which the organization operated.

The annual reports of the Illinois Central Railroad Company spanning the quarter-century period between 1915 and 1939 were analyzed to determine the environmental impact of major historical events in the early 1900's. This period witnessed two major unprecedented events in the history of the United States, World War I and the Great Depression. The period under analysis ends at the beginning of World War II a time when railroading and business in general changed markedly. The early annual reports of the Illinois Central (those from the 1850s) have been documented as among the best examples of early financial reporting (Flesher, Samson and Previts, 2003). Thus, the company has had a long history of excellence in reporting. Whether this tradition of excellence extended into the era of the Interstate Commerce Commission (ICC) will be determined in this paper.

Illinois Central: The Main Line of Mid-America

The Illinois Central Railroad (IC) was arguably one of the most important railroads in America's history. It operated under its original name for 150 years. The birth of the IC was an historic event within itself. Among those advocating its creation were Stephen A. Douglas and Abraham Lincoln. On September 20, 1850, President Millard Fillmore signed its birth certificate: the first land-grant act of the federal government to aid the building of a railroad. The Illinois land-grant act established a new national policy of making land grants to encourage the development of railroads. The Illinois Central charter was signed by the Governor of Illinois on

February 10, 1851. The Illinois Central received almost three million acres of public land in Illinois under the terms of the congressional land-grant act and the state charter (Corliss, 1950, 20, 28).

The incorporators of the Illinois Central (IC) immediately went about building the railroad. By 1856, the 705-mile long IC was the longest railroad in the world. The IC prospered and expanded throughout the remainder of the nineteenth century. The IC undertook an extensive policy of expansion by activities in the areas of agricultural and industrial promotion. By 1900, the IC had approximately 5,000 miles of track and was among the ten largest railroads in the country (Corliss, 312). In the early 1900's, the IC launched several agricultural promotions. In 1916, the company began a long-range program of supplying farmers in its territory with pedigreed bulls for the improvement of dairy herds (Corliss, 417). This is just one example of the many programs undertaken by the IC to expand its business through promotion of agricultural and industrial development in its territory.

In 1915, the IC operated an average of 4,770 miles of road, grossed over \$61 million in operating revenue, and had 10,963 stockholders (Annual Report, 1915). By 1939, despite the effects of the Great Depression, total mileage operated was 11,201; operating revenue was greater than \$111 million; and stockholders numbered 17,972 (Annual Report, 1939). By observing the annual reports of these years alone, a reader may infer that the IC had experienced a quarter century of steady growth. But such was not the case. For example, in 1925, the IC operated 6,243 miles, grossed more than \$178 million, and had 24,352 shareholders (Annual Report, 1925). Significant changes occurred between 1915 and 1939, and a review of the annual

reports spanning this period revealed the occurrence of significant environmental events that affected the performance of the IC. Before discussion of these events, a brief description of railroad accounting methods is in order.

Railroad Accounting

The heart of railroad accounting lies in its classification of accounts. From 1907 to 1914, the Interstate Commerce Commission (ICC) promulgated the various classifications of the system of railway accounts (Adams, 1918). In general this classification scheme fell into six sections (Adams, 36-38):

- (1) Classification of expenditures for road and equipment.
- (2) Classification of operating expenses.
- (3) Classification of operating revenues.
- (4) Classification of income accounts.
- (5) Profit and loss and appropriation accounts.
- (6) The general balance sheet.

The result of the ICC orders setting forth this classification system was a standardized system of accounts used by the American railroads. A standardized system was desirable for several reasons. Although the railroad industry was not an organized service unit in form; in substance, it was very standardized. The tendency toward a unified system was due partly to the nature of the industry. The use of joint facilities, employment of joint employees, the interchange of freight, and operations in connection with other railway lines led to uniformity of contracts and operating agreements. Inter-corporate, inter-divisional, and inter-industrial transactions all contributed to the need for a uniform system of accounts (Adams, 4-6).

A standardized system of accounts was also necessary for the railway to comply with the provisions of federal, state, and municipal regulatory agencies. For the ICC to fulfill its mandate to regulate the railways and set rates, a standardized method of accounting was necessary. Comparability of the accounting records among companies was achieved by instituting a uniform system of accounting that utilized a prescribed classification of accounts. This comparability proved to be extremely helpful during World War I. Alternatively, some researchers have argued that the ICC requirements reduced the quality of some railroad annual reports because the federally mandated reporting rules resulted in a “dry, almost morbid” presentation. This was certainly noticeable with the IC since the company had published lengthy, informative reports prior to the ICC requirements, but the reports of the early 1900s were shorter and less informative (Feeney, 37-41). Still, the ICC-mandated reports were superior to those presented by most companies in most other industries.

Significant Events Affecting the National Economy

By tracing the pattern of Gross National Product (GNP) from 1900 to 1940, two distinct changes in the pattern of the nation’s economy are evident (see Exhibit I). Between 1900 and 1915, the economy experienced moderate growth. After 1915, the economy escalated through 1919 (with the greatest increase in 1917), then dropped off in 1920. This marked the period of World War I. The second significant change occurred between 1929 and 1930. The economy dropped off drastically and recovery was not achieved until 1940. This was the era of the Great Depression.

While history books may tell of the effect of World War I and the Great Depression upon the nation, the annual reports of IC for these years reveal the effect of these events upon the IC and the industry. An unprecedented event occurred in the railway industry during the war, and this event had a significant impact upon the IC's financial statements.

The Impact of World War I on the Illinois Central

The United States entered into World War I in April of 1917. At that time, the railway industry was highly competitive and revenue per ton mile was at a low level (Hines, 1928). This was compensated for by an increase in volume which allowed moderate increases in revenue and reduction of costs. Exhibit II presents the operating revenue for the IC from 1900 to 1940. Between 1900 and 1915, the IC experienced moderate growth generally paralleling that of GNP. However, operating revenue for 1918 and 1919 dropped to unrealistic levels. Exhibit III shows operating revenue and net income for the IC from 1914 through 1939. This graph reveals that operating revenue and net income were essentially equal to each other in 1918 and 1919. An explanation for this phenomenon was found in the president's message to the stockholders in the 1917 annual report.

According to C.H. Markham, President of IC, the President of the United States by proclamation of December 26, 1917, took control at twelve o'clock noon on December 28, 1917 of the transportation systems of the country as a war measure(Annual Report, 1917). Unification of the railroads under a single authority was considered necessary for mobilization of the country's resources to meet the requirements of the war. The railways were operated under

the control of the Government Railroad Administration until February 29, 1920 (Hines, 211).

Federal control of the railroads resulted in unique and difficult problems not usually encountered in railway accounting. There had to be an accounting between the owners of the railroads and the operators of the railroads. Current operations were handled by the Federal accounting officers on each railroad much as the railroads' accountants had done in the past. These Federal accounting officers continued to account for operating revenue and expenses in accordance with the rules of the ICC. The local Federal accounting officers also had to maintain a separate set of records for the Railroad Administration. There also had to be accounting between the Railroad Administration and the corporations that owned the railroads. The resolution of these accounting problems was greatly facilitated by the use of the railways' standardized system of accounting (Hines, 140-143).

The revenue for the IC in 1918 was primarily composed of an Accrued Standard Return of approximately \$16 million. This represented an annual compensation guaranteed to the IC under Section I of the Federal Control Act and the amount was certified by the ICC (Annual Report, 1918). Net income was approximately \$11 million. The format of IC's income statement had changed drastically from the 1917 format. The standard income statement format in previous years had several categories of revenue: railway operating revenue, incidental operating revenue, joint facility operating revenue, and nonoperating income (each category had several accounts). The 1918 statement had only 2 categories of income: railway income and nonoperating income. The railway income category was composed of the accrued standard return and revenues prior to January 1, 1918 (included under instructions of the ICC). There

were few expenses other than interest and rents.

The 1919 statement was similar to the 1918 statement. Control of the IC was returned to the corporation on March 1, 1920. The financial statements for 1920 were a combination of normal operations and federal control. The president's letter in the 1920 statements noted that the federal government guaranteed six months of income (beginning March 1, 1920) equal to not less than six months of income under government control. The IC had to make a claim on this guarantee since railroad operations resulted in a small loss. The government guarantee, however, resulted in a net income of over \$13 million. It was also noted that freight rates and passenger fares had increased substantially during the year, with increases up to 40% for freight and 20% for passengers. Also, the change in operations had resulted in the company acquiring over 3,500 coal cars from the government in exchange for over \$9 million of equipment-trust bonds. An additional \$13.5 million in rolling stock was acquired from other sources, but were financed by the government buying the company's equipment-trust bonds. The final item in the president's letter noted that the number of stockholders had increased during the year to 13,645 owners, up from 11,966 at the end of 1919.

The 1920s

In 1921, revenue increased by about 16% to \$141,127,065. However, net income declined to \$9,700,794. It was noted that the 1921 statements were not comparable to those of the preceding year because of the fact that the federal government had operated the railroad during the first two months of 1920, and then guaranteed an income for the next six months. The

president's letter highlighted the fact that the number of stockholders had increased to 15,175.

Also noted was the fact that the number of pensioners had increased to 653 retirees, with pension payments totaling \$260,248, versus only \$33,895 in the previous year.

Revenues increased again in 1922 to \$154,860,387, with a net income of \$16,054,889.

The president noted that there had been a business revival throughout the territory served by the IC. The number of stockholders had increased substantially to 19,427. This continual growth in the number of stockholders, an increase of over 62% in just three years, is emblematic of the increase in stock market investing that the general public undertook in the 1920s. As in the previous year, the president's letter proudly noted that the company had paid pensions of \$282,664 to 686 pensioners.

For 1923, operating revenues had increased to \$165,626,981 and income was \$15,386,186. It was noted that the volume of traffic was the heaviest in company history. There was another increase in the number of stockholders to 19,476. The amount paid for pensions was no longer mentioned in the president's letter, but the detailed income statement showed that pension expense had increased to \$313,812.

The opening paragraph of the 1924 report noted that due to the consolidation of the Yazoo & Mississippi Valley Railroad Co., a wholly-owned subsidiary, the financial statements were not comparable to those published in the preceding year. However, the comparative statements showed the differences from those statements that had been published in 1923. Although the net income was the same (apparently the IC had been using the equity method of accounting for investments in 1923), the total revenues and expenses were substantially

increased. Whereas the 1923 statement had reported revenues of \$165,626,981, the revised figure reported in the 1924 comparative statements showed revenues of \$186,763,166 for 1923. The revenues for 1924, however, were lower than this at \$173,838,171. The president's letter noted that a "depression in business was in evidence most of the year throughout the territory served by your lines, as a consequence of which there was a substantial decrease in revenues" (Annual Report, 1924). Despite the depression in business, the number of stockholders again increased, this time to 21,804. Pension expense also increased again, to \$391,024.

Revenues increased slightly in 1925 to \$178,169,625, with a jump in net income to \$17,551,742. The large cotton crop of 1925 helped the freight business as did an increase in crude petroleum shipments. Apparently the growth in the number of motor cars was creating an increased demand for petroleum products. The number of shareholders increased by more than 11% to 24,352. This was more than double the number in 1919—just six years earlier. Pension expense of \$432,038 was up again.

Revenues increased again in 1926 to \$186,632,489, but income declined slightly to \$17,150,398. It was noted in the president's letter that taxes were 28.37% of income from operations, and exceeded dividends paid to shareholders. Perhaps for this reason, the number of shareholders declined for the first time in many years—to 23,471. Pension expense was again up—to \$575,186.

Although the reporting of pensions might be construed as an element of social reporting, such reporting was much more evident in 1927 with discussion of the great floods of that year. The worst floods ever to hit the Mississippi Valley hit in April and May of that year, with the

worst hit areas being along the lines of the IC in Mississippi. The president's letter noted that:

The System participated actively in the relief work, furnishing a large number of relief trains and placing equipment at various points for the temporary housing of refugees and their effects. The System also sustained serious losses to its own properties in the flooded areas and, in addition incurred substantial losses in revenue due to the temporary suspension of business in the territory affected (Annual Report, 1927).

The company experienced property damage of about \$2 million in the flood. A newspaper article noted that "it is difficult to say what effects the floods will have on general conditions in our territory, but early indications are that the cotton crop will be slightly less than it was last year on account of the reduced acreage." (Illinois Central . . . 1927).

The decline in 1927 revenue was not major; the total was \$182,967,560, with a net income of \$12,131,871. Again it was noted that tax payments exceeded dividend payments. The number of stockholders again declined, this time to 22,209. Pensions were up again—to \$669,401.

In 1928, revenues again declined, to \$179,605,452, with net income of \$13,250,497. Again, taxes exceeded dividends. The number of stockholders was again down—to 21,147. Pension expense was again up—to \$780,875.

Despite the stock market crash of October, 1929, there was no mention of the crash or the onset of the Great Depression in the 1929 annual report. Apparently it was still too early to notice the downturn in the economy. Revenues for the year were up to \$180,976,182, with income up to \$13,520,383. The president reported that tax payments were up to 29.97% of

income from operations and again exceeded dividends to stockholders. During the year, the IC began operating busses via a new subsidiary. Perhaps because of the stock market crash, the number of stockholders again declined—to 20,314. Pensions were up substantially to \$887,107.

In summary, the decade of the 1920s was essentially a tale of two decades—the first half was a period of growth and prosperity, while the last half, in retrospect, was a march toward the Great Depression. Despite growth in revenue throughout the decade, the growth in net income did not keep pace. In fact, income stayed relatively static throughout the decade. As Appendices I and II illustrate, the IC's operating revenues mirrored the growth in the gross national product. However, the trend line for net income stayed relatively flat. The initial growth in the number of shareholders was similar to what was happening at companies throughout the nation. However, the later decline in the number of shareholders may have been indicative of how some parts of the economy were not keeping up the pace of growth. Droughts in 1925 and the great flood of 1927 also affected the company, as did the growth in the number of motor cars. Whereas the growth in the number of automobiles meant less passenger traffic for the railroad, this loss of revenue was to some extent offset by the growth in shipping of petroleum products. Despite the fact that income did not keep up with revenue growth, the decade of the 1920s was still the best of times for the IC; the worst of times were about to come.

The Impact of the Great Depression on the Illinois Central

Another major historical event affecting the IC (as well as the entire nation) was the Great Depression. The Depression was mentioned on the first page of summary data in the 1930

annual report. Revenues had declined by 18% to \$148,455,904, but net income, although down, was still respectable at \$9,289,590. The president's letter noted that business had declined the most dramatically in volume in the company's experience. It was mentioned that the freight decline had been accelerated by drought (the beginning of the "Dust Bowl" years) in the Midwest and Mississippi Valley and that buying power had been curtailed by the closing of 735 banks in the IC's territory. It was also noted that passenger revenues continued to decline due to competition from other modes of transportation. The number of stockholders had declined for the fifth consecutive year. Pension expense was again substantially increased to \$1,068,943.

The company experienced losses in 1931, 1932, 1934, and 1935. In October, 1931, the company omitted the payment of quarterly dividends on its common stock for the first time in 71 years, and its stock had dropped from \$136.75 per share in 1930 to \$4.75 per share in 1931 (Corliss, 427). Although business had been down throughout the year, the first quarterly dividend for 1931 was paid in the amount of \$1.75, but the impending suspension was foreshadowed by a reduction to \$1 in the second and third quarters. The \$1.75 per quarter rate had been maintained since 1918 ("Dividend...", 1931). During the depression, drastic measures were taken. Officers of the company took a voluntary salary reduction; the railroad unions granted a 10% wage concession; and several facilities were abandoned or retired. The human side of these cut-backs meant that about 32,000 workers lost their jobs between 1929 and 1933 (Corliss, 427). Also, the number of shareholders continued to decline. By the end of 1935, there were only 19,250 stockholders, compared to 20,091 in 1934. An additional decline in 1936 brought the stockholders down to 18,129. The upturn, albeit small, began in 1937 with an

increase of 29 shareholders. By the end of 1938, the number had increased to 18,545, but 1939 witnessed another major decline as the number of shareholders dropped to 17,972. Actually, the 1939 decline may have been because the stock price had increased during the year, thus giving an incentive to sell. Throughout the Depression era, the company issued no additional stock. The financial markets were simply not conducive to new sales of securities of any type.

The IC managed to increase net income from a deficit of \$3.5 million in 1932 to a profit of \$158,901 in 1933. This was primarily the result of the Chicago World's Fair held in 1933 and 1934 (running for 340 days in the two-year period). The number of paid admissions totaled more than 40 million and the IC had carried more than 36 million suburban passengers during that period (Corliss, 431). By taking a giant leap of faith, one may make inferences about the social climate of the time. Even though the country was in the midst of the worst depression in its history, the spirit of the American people still reflected hope and optimism as revealed by the attendance at the World's Fair.

To illustrate the effect of the Depression on the IC, the following comments have been excerpted from the President's message in annual reports of 1930 through 1933:

The depression, starting in October, 1929, continued through 1930 and became worldwide in its effect. The loss of tonnage and revenue in 1930, in comparison with 1929, was the most marked and drastic decline in our experience."

"The year covered by this report was one of the most trying in the experience of the Illinois Central System."

"In 1932, for the third successive year, the volume of business transacted in the United States receded from the levels of the preceding year. (dividends on preferred were suspended in 1932). A comparison of 1932 and 1929 ... operating revenues of all railroads decreased 50.3 percent ... net operating income of all railroads declined 73.8

percent ...”

“The business depression which prevailed in the three preceding years continued in 1933 and in the early part of the year was intensified by the suspension of banking operations.”

The remaining years of the depression saw the IC reporting small levels of income, with only \$2.2 million in net income in the best of those years, which was 1939. Recovery came only with the onset of World War II. It should be noted that in the loss years, the company seemingly had a positive cash flow since much of the fixed expense was depreciation on plant and equipment.

Limitations

Accounting historians may seek out unusual or innovative accounting practices developed to meet the needs of the users of the financial information. However, the use of financial statements of a railroad during the early years of the 20th century does not lead to the discovery of unique or innovative practices, because railroad accounting methods as prescribed by the ICC were standardized throughout the 20th century and the financial statements reflect this regulation. However, the Illinois Central, as it had in the pre-ICC days, did provide meaningful financial statements during the period from 1915 to 1939, primarily through the management discussion of the year’s operations.

Contributions

Although this study was primarily descriptive and little contribution to accounting

thought was set forth in the annual reports of IC, there are still contributions to be inferred from the study. Years before the accounting profession had an accounting framework in place, the ICC had a very sophisticated standardized system of railroad accounting. The accounting requirements of the ICC led to such conformity in practice and comparability of financial statements that the government was able to account for the entire railway system of the country as a unified system during World War I. In fact, the financial statements for the 25 years covered by this study were all identical in appearance, organization, and format. For comparability purposes, these statements were beyond compare.

Conformity with generally accepted accounting principles (GAAP), however, does not preclude the use of alternative accounting procedures. There are choices to be made within GAAP and this may lead to a lack of comparability between financial statements of different companies within the same industry. Indeed, this lack of comparability is a common criticism of financial statements.

While this study of annual reports did not disclose any innovative accounting responses to environmental factors, the graphical representation of the performance of the IC revealed the existence of historical events and their impact upon the IC and/or the railway industry. Indeed, this was not really an accounting study, but a study of general history in the early part of the 20th century. The only aspects of real accounting significance would have been the move to consolidated financial statements in 1924, and the examples of social reporting—particularly with respect to pensions and the great flood of 1927. The impact of the Great Depression on the company is also indicative of such impact on the entire economy.

Summary and Conclusions

Accounting historical research need not be limited to journals, ledgers, and other books of accounts. Annual reports of corporations provide a rich source of information that may span decades. Results of operations of railroads are comparable between companies and over periods of time due to the standardized accounting methods mandated by the ICC. This comparability over time allows for the discovery of significant events that affect the company's performance.

Contributions of research need not be limited to the discovery of how a firm responds to its environment through its accounting practices. According to Chatfield, accounting can be viewed as a mirror of socioeconomic development. Annual reports spanning a long period of time can also be viewed as a mirror of the historical events affecting a nation as well as the organization. Indeed, the Illinois Central Railroad—the Mainline of Mid America—was impacted by the same events that impacted much of the Mississippi Valley. Whether it was tornados, floods, strikes, world war, or economic depression, the Illinois Central was affected, and so were the company's financial statements. The annual reports issued by the Illinois Central Railroad between 1915 and 1939 are a mirror of America at the time.

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