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Curriculum Unit 80.ch.07  
by Alison Birmingham

During the American Revolution the need for money became acute. Supplies had to be bought and soldiers had to be outfitted and paid. The state governments had to issue paper money against which there were no reserves. The notes were often acceptable only in the state of origin or in neighboring states. The newly formed American government had to finance military payments and purchases of supplies, too. The first issue of Continental paper money for \$3,000,000.00 was authorized by the Congress on May 10, 1775. The notes proclaimed the bearer was entitled to a Spanish milled dollar. Spanish silver dollars, brought back by traders from the West Indies, were the chief circulating medium of the colonies.

People invested in Continental and State securities. They loaned millions of dollars to the Continental and state governments as both promised to repay the principal and interest in valuable currency following the end of the war. Because the value of currency and securities fluctuated, businessmen speculated in them. They later avoided Continental bills of credit as they fell in value. After 1779, they bought French bills. It became common to use securities as a medium of exchange after the war. The wide circulation of money and the growing use of it helped to develop a money economy and reduced the traditional dependence on barter.

By 1781 this paper money had run its course. The value had depreciated so much that a single Spanish milled dollar could buy anywhere from 100 to 1,000 Continental dollars. A bushel of corn sold for 150 Continental dollars and a suit of clothes for several thousand. The issue of paper money was stopped. For eighty years afterward, the United States government issued no more paper money. The phrase "not worth a Continental" was applied to any thing worthless.

Because the war limited foreign trade, merchants developed additional areas of enterprise. The war opened new avenues of wealth and merchants used their abilities to provision the army. As they scoured the countryside for produce and livestock, they gained valuable information about local resources. They obtained a better knowledge of what and how much the farmers produced and the problems of getting the produce to market. They established working agreements with farmers with whom they dealt. Assistant Commissary Eliphalet Lockwood reported that he was able to provide the troops encamped at Redding during the winter of 1778-79 with over 22,000 pounds of flour, 249 gallons of rum and 281 quarts of salt in a two-month period. Through their positions as commissaries, businessmen gained both immediate and long range benefits. Some gained national recognition and made national business contacts. They gained more experience at handling large scale operations, they acquired a greater knowledge of the country's resources, they amassed wealth, and they obtained political positions. During the Revolution a new entrepreneurial class of businessmen

emerged. <sup>3</sup>

The effects of the Revolution benefitted only some of the people. The poorest people lost out. When British manufactures were unavailable, prices rose due to the great demand for the diminished supply of goods. At the same time the war benefitted others. Prices for farm products continued at very high levels. Not only did farmers in all sections benefit but so did craftsmen. During the war they were freed from British competition, and the demand for their products was great. Yet despite the growth of trade and manufacturing, cash was scarce and this caused problems. The poor had difficulty paying their taxes. Many people fell into debt and many left for other states.

Economic motives were in part responsible for the final ratification of the Federal Constitution because it held out the promise of the payment of the national debt which would establish public credit. Luring the years of the war, Connecticut citizens had bought \$1,310,000.00 worth of loan office certificates, so Connecticut held a large part of the public debt. Though Congress attempted, the unanimous vote necessary was never available to pass a tariff to provide the funds for paying the national debt.

Alexander Hamilton, the first Secretary of the Treasury under the Constitution, presented his plan for funding government expenses and paying the public debt which by the amounted to fifty-four million dollars. In August 1790 Congress passed the Funding Act and also assumed much of the states' debts. The states gained enormously through the funding, assumption, and settling of accounts. The states became financially solvent and millions of dollars were put into circulation. In December 1790, the Federal Government chartered the Bank of the United States. It was privately owned but could issue Bank notes. The Bank's deposits created capital which the bank directors could use to fund larger enterprises. A capitalist class of entrepreneurs was developing.

After the Revolution, merchants were freer to trade, but the scarcity of adequate returns for the European trade continued to be a great problem. American merchants had difficulty finding the means to pay for the quantities of goods imported.

The outbreak of the war between England and France in 1793 was the opportunity for the Americans to obtain their desperately needed returns. As neutrals they carried West Indian produce into American ports, unloaded and paid the duties, and then re-exported the goods as American. Merchants prospered with the coastal and West Indian trade as commercial profits soared. The stock of ready money was tremendously increased. Banks were established and used as agents between creditor and trader. There were dangers in the Caribbean trade with privateers, slave revolts, fighting among, the European powers, and the uncertainty of neutrals' rights. The profits must have made the risks worthwhile.

Businessmen became a money power and they used the money they made from the expansion of trade and from the payment of the public debt to invest heavily in banks, insurance companies, turnpikes and land speculation. Commercial agriculture increased, and, to extend their sources of farm produce further inland, coastal merchants in port towns began to petition the state legislatures for incorporation of turnpike companies. This was an era of turnpike building. Connecticut had the best developed system in country when from 1795-1802 there were over twenty turnpikes incorporated in the state. (Appendix A)

Among those directly affected by the conditions of the roads, were stagecoach operators and storekeepers who made semi-annual purchasing trips to New York or Boston and who transported their goods to inland towns. Regularly scheduled baggage wagons operated between the larger towns. Independent teamsters also worked for storekeepers, factory owners and other businessmen. Transportation costs affected prices.

During the wars between England and France, the British impressed American sailors. In November 1807, Britain's Orders in Council required all vessels trading with any European port under Napoleonic control to stop first in England and unload their cargoes and pay duties before proceeding. Lacking the naval force to defend our neutral rights, President Jefferson chose to avoid further losses by retreating from the seas all together. The Embargo of 1807 accomplished what the English and French could not. Neutral trade was at an end. New England fell from its position of prosperity. The Federalists hated Jefferson because in 1807 New England merchants had enjoyed their most prosperous year ever.

Now New England was isolated from the rest of the country by its bitterness toward the national government. Shipyards laid off workers in anticipation of a fall off in orders. Farm prices fell as the West Indian trade shut down. The shopkeepers had farmers and shipwrights for customers, and all these people faced economic depression. At no time between the Embargo of 1807 and the War of 1812 did American exports come close to reaching previous levels. The Federalists of New England withheld all possible support of the war.

The economic significance of the Embargo of 1807 and of the War of 1812, was that they drove capital and labor into manufacturing. The woolen industry increased when the importation of British cloth was stopped during the War. Labor was plentiful because so many sailors and sons and daughters of farmers were idle. Money was available as merchants were no longer investing in shipping. A new manufacturing era was beginning.

When peace was declared in 1815, British manufactured goods glutted American markets and created impossible competition for domestic producers. This proved to be further impetus for emigrating west. Before 1800, farmers seeking cheaper, more fertile lands had emigrated to New York State and into the Western Reserve. Emigration had continued into New Hampshire, Vermont, Maine, Pennsylvania and Ohio. After the peace in 1815, the rush westward gained momentum. Newspapers were filled with advertisements for land and letters from western correspondents. Travel books and gazeteers were published.

Western wheat began to be sent east or to the market of Montreal. Hogs were driven from Ohio to New York. With new markets available, men of means could afford to invest in the new lands and emigrate themselves. By 1815 the emigrant out of Connecticut was no longer solely of the laboring class; many were men of some means. Eastern capital was being invested in western roads and canals.

Road building was undertaken on a national scale. In 1811 the first contracts were let for building the first ten miles of the Cumberland Road. By 1817 it was open through Washington to Wheeling, West Virginia. The Cumberland Road was used for two decades by great stagecoaches and freight lines as well as the long lines of Conestoga wagons bringing families west. Congress provided a new appropriation of funds to extend the Cumberland Road from the Ohio River to Missouri.

The Report on Roads and Canals presented to the Senate in 1808 by Albert Gallatin, Secretary of the Treasury, proposed the creation of an intercoastal waterway with short canal links. Unfortunately, the surplus revenues upon which Gallatin counted as the source of funding disappeared as the War of 1812 approached and the federal government never took a role in canal construction. A much greater role was played by state governments with public works programs to fund the Erie Canal and others. In Connecticut the canal at Windsor Locks and the Farmington Canal were built largely by private enterprise.

Private capital was used for improvements in water transportation. Steamboats began their runs on Long Island Sound in 1815, but not until after Robert Fulton and Robert Livingston's monopoly was ended with the decision of Chief Justice John Marshall in *Gibbons vs. Ogden* were other steamboat companies able to set up

runs to New York City.

Steamboats were first run on the Great Lakes by enterprising Buffalo citizens who, in 1818, secured rights from the Fulton-Lingston monopoly to build the first of the great fleet of ships that ran on inland seas. Regular lines of steamboats formed on the Ohio to connect with the Cumberland Road at Wheeling.

The mix of private capital and state government funding was vital to the development of our country's transportation networks. The year 1817 was marked by three great undertakings: the navigation of the Mississippi River upstream and down by steamboats, the opening of the national road across the Alleghany Mountains, and the beginning of the Erie Canal. No single year in the early history of the United States witnessed three such important events in the material progress of the country. <sup>4</sup>

After peace was declared in 1815, factory owners and stockholders wanted legislation favoring manufacturing because of the competition of British manufactured goods. The Tariff of 1816 helped some manufacturers, but the cotton and woolen manufacturers wanted more help from the legislatures. In earlier years government leaders had thought of tariffs mainly as a way to raise money. Not they began to see them as a way of reducing imports. (Appendix B)

English textile mills were dependent upon raw cotton from the American South. As the demand increased more than the supply, prices went up. The demand for cotton led to expansion of acreage in the South and West, in turn leading to a greater demand for manufactured products from the Northeast. This profitability of the crop induced planters to switch some of the land previously used for foodstuffs to cotton. This led to higher prices for Western corn and pork.

A pattern of domestic trade was the result of this regional specialization. The Northeast developed its manufacturing but needed foodstuffs for its growing urban centers. A substantial direct trade was established with the West over the Great Lakes and Erie Canal to the Western markets. The South provided cotton for the Northeast mills as well as for export.

Southerners opposed the tariff because they were afraid that the British might establish retaliatory tariffs. Also American tariffs raised prices of manufactured goods Southerners used, but did not raise the price of cotton they sold. Long years of debate over tariffs between the southern planters and the northern manufacturers who were protected by tariffs resulted in a series of compromises. By the 1830's politicians and businessmen were choosing sides in tariff arguments on the basis of regional interests.

In the first half of the 19th century, manufacturing took place wherever there was an adequate supply of water for power. The size of the mills in southern New England was restricted by how much power could be generated from local streams. For an explanation of water wheel technology, See Unit VIII, Appendix H There was a class of wage earners in New England, but the population remained primarily rural in character until 1850. Factories were scattered around the countryside rather than clustered in the larger towns. After the Civil War, factory owners took advantage of steam power for running the machines, the railroad for distributing their products, a more adequate supply of labor and large amounts of available capital.

### **The Role of The Merchant Capitalist in Connecticut**

The following discussion centers on the role of the merchant in the growth of the early agricultural export sector and later as the means of providing capital for the early manufacturers as they organized their businesses and sought markets for their products. In the 1790's the country storekeeper was the financier of

his locality, acting in the capacity of a broker either by extending credit or by making direct loans. This phase of his business was probably more remunerative than his more obvious work of exchanging West Indian and imported goods for the farmers' corn or boards of wool.<sup>4</sup> Even after barks were established in the 1790's in Hartford, Norwich, New London, and Middletown, private lending continued on a large scale. You can build a picture of this by reading store ledgers.

In the unit's source book are several pages from Connecticut store ledgers. The first source (Appendix C) from a Fairfield store in 1811 show the debits of Elijah Beers on the left side and his credits on the right. He paid for the calico, mug, and sundries by bringing in to the store his chickens, turkeys, and chestnuts. This particular storekeeper does not seem to loan much money and this contrasts with the Lockwood store ledgers which by 1816 show many financial transactions. (Appendix D)

As manufacturers began large-scale production of hats, shoes, coffee mills, and other products, they turned over the marketing of the goods to merchants who acted as their agents. Merchants had developed their own distributive networks over years of business activity. They knew from experience the best trading times and places. They knew trusted agents scattered across the nation's port cities. There are several illustrations of this idea in the source book. A letter from a sloop captain (Appendix E) shows the difficulties of selling the good himself. The letter from Bostwick and Booth (Appendix F), a store in New York, gives advice to a would-be businessman about finding a reliable agent.

The same merchants who distributed the goods were competent to arrange financial transactions. They had excess profits looking for investment, and they began to provide the capital needed by the developing manufacturers. If the early manufacturer had not had available the financial expertise and resources of the merchants, the pace of industrialization would have been slowed.<sup>6</sup>

Manufacturers needed long term capital (i.e. money loaned for more than a year) to buy the fixed assets (machinery, buildings) for production. When they needed to expand or replace obsolete equipment, they needed long term capital. Often the manufacturer put all his own savings in his fixed assets and had nothing left over to meet current operating costs for taxes, transportation, interest, wages, and raw materials. He needed short term loans to meet these expenses.

Merchants were the sources of short term loans. They had the money and were used to taking risks to accumulate more. That was the way they had accumulated their wealth. They supplied the capital by direct investment or by credits to the new companies. Sometimes manufacturers and merchants joined forces as loosely held partnerships or through stock ownership. The American economy was still agricultural based, and harvest cycles necessitated continuous need for credit. Necessarily, there were considerable delays before the suppliers and lenders received payment in full.

Customers paid for their purchases by sending a note like a postdated check payable at the end of the credit term. If the note came from a local resident of good standing, the note could sometimes be cashed at a bank for a fee (discount). This discount added to the cost of doing business.

In the early 19th century there were barriers to the movement of capital among industries. As markets expanded banks refused to accept notes from distant people who were not known to them. Capital formation data suggests that the American market only gradually began to move funds from region to region and industry to industry. There was a disinclination of capital to migrate, and it wasn't until the early 1900's that there was long term financing in a national market.<sup>7</sup>

Before the innovation of formal capital market mechanisms, transfer of capital from commerce to manufacturing was very personal in nature. <sup>8</sup> Initial investment for new businesses was drawn from the local areas through personal contact of a family and friends. Retained earnings (savings) were the source of capital for expansion. As capital was needed for mechanization, the early manufacturers used their own savings or were backed by their families, merchants, farmers or professional men who put together small amounts of capital.

In the source book are several examples to illustrate how some merchants transferred their own funds to invest in manufacturing. The sequence of two letters about the slitting mill show the Lockwood family interest in the purchase of the mill. They used their profits from the West Indian trade, their store, and their money lending. (Appendix G)

Another merchant, Samuel Sheldon of Litchfield, shows this direct transfer of funds from his storekeeping to his new cotton factory . Within the same journal he shows the numerous loans he made through his store (Appendix H), and, after several blank pages, he begins to account for the wages of the people who came to work for him in his factory. (Appendix I)

The greater demand for capital by manufacturers called for more formal financial institutions. Commercial banks, those owned by shareholders, were chartered by the state when a group of investors would set aside a reserve of specie of their own assets, the bank's capital, and then solicit deposits and make loans in the form of engraved notes. These were bank obligations to redeem for specie (gold or silver) on demand in exchange for the borrower's promise to pay back the loan with interest. The banks hoped these notes would circulate as money. The variety of banks available in Connecticut is shown in the store ledger of Samuel Sheldon (Appendix H). He very carefully set down each note for the years 1797-1810. The daybook does not reveal the interest paid on the notes because M. Sheldon discounted them. In other words, he did not exchange a two dollar note for the full two dollars. He retained some of the two dollars for himself. Money lending must have been profitable for Mr. Sheldon as he owned two stores, one in Litchfield and one in Vermont where his son was in charge. In 1811 he opened his cotton factory.

Mutual banks are a particular type of commercial banks because they are owned by the depositors. They provided a safe place for small savers to hold their accumulations. They had limited regional activities but did act to mobilize large blocks of capital for the New England railroads. As late as the Civil War these banks were the most important financial intermediaries in the country. Today, mutual banks are limited to making loans only for real estate and not for working capital.

New institutions for financing business developed in the 1820's when Connecticut began to pass incorporation laws to make it easier to incorporate. The corporation was a business institution with a life of its own. A mill owner no longer would be personally bankrupt if his business failed. In the same period the courts began to interpret the rights of corporations. Capital mobilization was made easier when corporations had the right to operate anywhere in the United States and when contracts were protected by law.

Capital was needed for improvements in manufacturing techniques. If technological knowledge is to affect productivity it must result in inventions or in improvements in organization and technology that are adopted by a number of firms. The larger the number, the wider the diffusion and the greater the impact on economic growth. There was this "technological convergence" in the machine tool industry. This spread of technology resulted in greater demand for capital for such things as metal machinery instead of earlier wooden materials.

The basis of our economic growth in the late 19th century came about gradually during the formative years

1790-1860. It was not until after the Civil War that we experienced the enormous thrust of the industrial revolution. The creation of modern financial institutions to serve great industries did not come about until late in the 19th century and even into the 20th. Innovative ways to finance businesses continue to be created today such as public borrowing to fund equity purchases of companies' stocks (ESOTS) in behalf of employees. Another such vehicle is Small Business Investment Companies (SBIC's) which are venture capital programs encouraged by favorable government tax treatment.

Early manufacturers needed intermediaries to handle the complex financial problems which today are handled by formal institutions. In the 19th century, local merchants were instrumental to our economic growth as they supplied private capital to ensure the development of our industry.

## Notes

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1. "Te vitalizing the U. S. Economy," *Business Week*, 30 June 1980, p. 61.
2. Adam Clymer, "Carter's Vision of America," *New York Times Magazine*, 27 July 1980, p. 16.
3. John G. Saladino, "The Economic Revolution in Late Eighteenth Century Connecticut," Diss. University of Wisconsin, 1964, p. 82.
4. Archer Hulbert, *The Paths of Inland Commerce* (New Haven, Yale University Press, 1920), p. 128.
5. Richard J. Purcell, *Connecticut in Transition: 1775-1818* (Middletown: Wesleyan University press, 1963), p. 65.
6. Caroline P. Ware., *The Early New England Cotton Manufacture : A Study in Industrial Beginnings* (New York: Russell and Russell, 1966), p. 79.
7. Douglass C. North, *The Economic Growth of the United States 1790-1860* (Englewood Cliffs, New Jersey: Prentice Hall, 1961), p. 327.
8. *Ibid.*, p. 327.

## Bibliography

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+ Albion, Robert, William A. Baker and Benjamin Labaree. *New England and the Sea*. Middletown, Conn.: Wesleyan University Press. 1972.

This is a comprehensive study which includes West Indian trade.

\* Andrist, Falph K. *The Erie Canal* . New York: American Heritage Publishing Co., 1964.

This book contains special picture portfolios of early industry and Waterways.

\* Athearn, Robert G. *Yong America* . New York: Dell Publishing Co. 1963.

This is Volume 5 of the American Heritage New Illustrated History of the United States. It is rich in full color graphics.

+ Bruchey; Stuart. *Growth of the Modern American Economy* . New York: Dodd, Mead and Co., 1975.

This is an easily understandable introduction to economic research.

+ Clymer, Adam. "Carter's Vision of America." *New York Times Magazines* 27 July 1980. pp. 14-19.

+ Clark, Victor S. *History of Manufactures in the United States Vol 1 1607-1860* . New York: Peter Smith, 1949.

This gives detailed coverage of early industry.

\* Fisher, Leonard Everett. *The Peddlers* . New York: Franklin Watts. 1968.

A unique story is told with the famous Fisher etchings.

+ Fuller, Grace. *An Introduction to Connecticut as a Manufacturing State* . Northampton: Smith College Studies in History . 1915.

The findings of this early study match the new economic research.

+++ Grant, Ellsworth Strong. *Yankee Dreamers and Doers* . Chester, Conn.: Pequot Press, 1974.

This is a lively focus on Connecticut inventors.

\* Grant, Neil. *The Industrial Revolution* . New York: Franklin Watts. 1973.

This gives good coverage of the beginnings of industry to 1850.

\* Hoyt, Joseph B. *The Connecticut Story* . New Haven: Readers Press. 1961 Immigration and early urban development are covered.

\* Hurbert, Archer. *The Paths of Inland Commerce* . New Haven: Yale University Press. 1920.

This survey treats the theme of enterprise.

+ McLane, Louis. *Documents Relating to the Manufactures in the United States collected and transmitted to the House of Representatives* . 1833: rpt. New York: Burt Franklin. 1969.

+ Nettles, Curtis P. *The Emergence of a National Economy 1775-1815, in the Economic History of the United States* . New York: Holt, Rinehart. 1962.

+ North, Douglass C. *The Economic Growth of the United States 1790-1860* , 1860. Englewood Cliffs: Prentice Hall. 1961.

This is a good discussion of the sources of economic growth.

+ Pease, Joan and John M. Niles. *A Gazeteer of the States of Connecticut and Rhode Island*. Hartford, William S. March, 1819.

+ Purcell, Richard J. *Connecticut in Transition: 1775-1818* . Middletown : Wesleyan University Press. 1963.

+++ Ray, Deborah Wing and Gloria P. Stewart. *Norwalk: Being an historical account of that Connecticut town* . Canaan, N.H.: Phoenix Publishers. 1979.

This is a recent local history book with lively details.

+++ Revitalizing the U. S. Economy." *Business Week* . 30 June 1980.

+ Saladino, John G. " *The Economic Revolution in Late Eighteenth Century Connecticut* ." Diss. University of Wisconsin. 1964.

+ Tyler, Daniel. *Statistics of Conn. Industry*. Hartford: J. Boswell. 1846.

+ Ware, Caroline. *The Early New England Cotton Manufacture: A Study in Industrial Beginnings* . New York: Russell and Russell. 1966.

### **III. Objectives and Strategies with Sample Lessons**

CONTENT The student will know:

1. Economic growth means the increase of the total production of the economy and output per person over time.
  
2. Capital is one of the sources of economic growth.
  - a Personal savings are a source of capital
  - b Savings are invested to increase productivity
  - c Merchants transferred capital from commerce to industry
  - d New institutions were developed to promote savings.
3. Improvement in economic organization is a source of economic growth
  - a The evolution of a market economy aided our growth
  - b Profits are an important incentive in a market economy
4. Production is increased with a mix of private enterprise and government support.
  - a) Internal improvements in transportation aided our economic growth
5. Economic growth requires educated citizens.
6. Primary sources provided us with evidence about peoples' lives
7. Historical sources, while incomplete in a variety of ways, may provide much information

8. Many of the questions about history cannot be answered with the available evidence.

SKILLS The student will be able to

1. Find the main idea or details to prove a fact or support a statement
2. Summarize and outline a selection
3. Interpret and compare information from several sources to determine economic growth
4. Generate questions to elicit information from the data
5. Define a problem, formulate and test hyposthese, draw conclusions, form generalizations
6. Apply generalizations from 19th century data to today

7. Write a paragraph(s) describing how the merchant extended credit. Some of our students will not be going on to college and even fewer will become history majors. What we as teachers need to nurture is the development of amateur historians who know how to ask and answer historical questions of importance to themselves and whose understanding of history will make them more effective citizens.

Our students need to have a sense of the present, of how things happen. The first day's lesson in "ships to Spindles" should open with the students' own lives.

Lesson 1: Students will list questions to elicit information about their parents' jobs

*Procedure:*

Refer to their past experience in making Family Histories. Ask in they know what jobs their parents have, list some questions on the board to ask their parents that night. Talk about What a manufacturing census is. In small groups or individually, give them questions used by 1845 census taker (Appendix J) to suggest other questions to ask their parents. Which of the early census questions are appropriate to ask today? Add more questions to board list.

The students will learn that history is what we live in. It affects our lives and has to be understood on the basis of evidence. By learning to ask questions, the students will understand that the use of evidence is the most dependable way to find cut what happened. We need to teach them how to judge the validity of the evidence.

***Lesson II: Students will interpret data and relate it to contemporary economic problems***

*Procedure:*

Establish setting of Connecticut in 1817. Use extracts from an Address to the Conn. Society for the

Encouragement of American Manufactures (Appendix B). List on board stated reasons why New England should have manufacturing. Classify reasons. Make a generalization Clarify idea about balance of payments. Ask if these reasons are valid today. What are some ways we can promote manufacturing today? Tariff? Use board list and generalization to write a paragraph from a particular point of view (farmer, canal builder, manufacturer, importing merchant)

The following sequence of four to five lessons illustrates how primary sources can be used to foster inquiry.

Inquiring about Capital

**Define the Problem:**

- a) Define economy and economic growth using simple examples of increase in the production of goods and services
- b) Translate the Niles and Pease Gazeteer description (Appendix K) into simpler form to show Norwalk's economy in 1819
  - 1. separate relevant information from irrelevant data
  - 2. classify details into economic categories suggested in source (agriculture, navigation and commerce, and manufacturing) Focus on the manufacturing category
- c) Compare with Norwalk manufacturing census of 1845 (Appendix L)
- d) Analyze the evidence to show growth in Norwalk's economy
  - 1. ask questions to recognize parts of a problem What does the data say? What does it mean?
- e) Produce a statement of the problem (What causes an economy to grow? What factors are necessary for growth?)

Develop a Hypothesis or tentative solution

- a) Examine turnpike data (Appendix A) to focus on capital
- b) Infer that capital is necessary for economic growth
- c) Ask what kinds of evidence do you need to test our hypothesis (increase in number of mills, more workers, etc.)
- d) Identify variety of sources of data which will show the kinds of evidence you need

## *Test the Hypothesis*

a) Interpret the evidence of capital and growth of industries in Appendix M & N. Ask questions such as:

1. What can you find in the data that you expect or need to find if your hypothesis is correct?
2. What can't you find that you expected to find?
3. What do you find in your data that you don't want or expect to find if your hypothesis is accurate?
4. What new things did you find in your data that you had not thought of or expected?
5. What does the evidence say?
6. What does the evidence mean?
7. What does the evidence mean in the light of what you already know? How will it be useful in explaining what you are trying to explain?

b) Analyze the evidence

1. Note similarities and differences in amount of capital used, value of manufactured goods, number of persons employed)
2. Identify trends, regularities.

## *Develop a conclusion.*

- a) Evaluate relationship between evidence and hypothesis
- b) State a conclusion (capital is necessary to increase production)

## *Apply conclusion to New Evidence*

- a) Test hypothesis against new data (Appendix O)
- b) Generalize about the results (Increased capital is a source of economic growth)

Business letters were transcribed by clerks into Manuscript copybooks. The letter from Bostwick and Booth, storekeepers in New York, advised the use of an agent in the city. This letter should be contrasted with the ways of doing business by sloop captains in the West Indian trade (Source E) who were subject to the vagaries of the market.

(Courtesy Fairfield Historical Society)

Figure A

*(figure available in printed form)*

Figure B

*(figure available in printed form)*

Figure C

*(figure available in printed form)*

Figure D

*(figure available in printed form)*

Figure E

*(figure available in printed form)*

Figure F

*(figure available in printed form)*

Figure G

*(figure available in printed form)*

Figure H

*(figure available in printed form)*

Figure I

*(figure available in printed form)*

Figure J

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Figure K

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Figure L

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Figure M

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