

FROM CALVINISM TO CAPITALISM:
THE SECULARIZATION OF THE
AMERICAN WORK ETHIC**

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(I)

American economic development has marked the most successful story in the contemporary history of the world. A study on the successful story has raised various interests from different fields. One approach attempts to trace the European origin of American people. It is true that most Americans are descendants of Europeans. Therefore, we cannot understand American economic development without studying the influence from their ancestors. Of course, after three hundred years of development, America has developed her own style of economic system and civilization. In other words, the European heritage had been adapted to local conditions and been transformed into a different model called "American." The process of transformation should be very interesting to investigate. Undoubtedly, this transformation is a very complex process which is more than a short paper can cover. It is generally agreed that the Religious Reformation initiated by the German Martin Luther (1483-1546) and the French-born John Calvin (1509-1564) during 16th and 17th centuries had produced a crucial impact on the Industrial Revolution in England and other European countries of the 18th century.¹

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¹ The details may refer to John T. McMeill, *The History and Character of Calvinism* (London: Oxford University Press, 1954) and Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Charles Scribner's Sons, 1930).

The European settlements on the New World were gradually increasing during the 16th and 17th centuries.² Therefore, the idea of the Reformation of Calvinism would naturally be brought with the European settlers to the New World. How American economic development was influenced is very complicated. We intend to try to understand one aspect of this complicated process of the secularization of the American work ethic.

(II)

Economic development of a nation is a very complex process. It is still very problematic as to the possibility of having a theory of economic development. However, "economists and economic historians are in fairly general agreement that economic development is not an autonomous process, i.e. it is not a phenomenon that can be adequately analyzed and understood in purely economic terms. The basic reason for this is that economics are usually embedded in a culture of which they are an integral part, and in assessing the prospects for an economy's growth it is necessary to consider this broader cultural environment."³ Actually, the process of economic development may be referred to as a process of transformation from a traditional society into a modern one. This process which is usually named also as modernization "is rooted in the history of the West or, more precisely, the Atlantic community as it left behind the organic, hierarchical, functional, an religious society and ethos that characterized the late Middle Ages. The idea (of modernization) was forged to understand what had been transformed, lost, or sacrificed by the transformation."⁴

² The estimated population of the American colonies was 50,368 in 1650, and 250,888 in 1700, see Arthur C. Bining and Thomas C. Cochran, *The Rise of American Economic Life* (New York: Charles Scribner's Sons, 1964), p. 44.

³ Charles H. Hession and Human Sardy, *Ascent to Affluence, a History of American Economic Development* (Boston: Allyn and Bacon, Inc., 1969), p. 8.

⁴ Manning Nash, "Modernization: Cultural Meanings—the Widening Gap

In Medieval society, economics was a subordinate and not a dominant aspect of life. And what was dominant? The answer is, of course, that in economic matters as in so many other facets of medieval life, the guiding ideal was religious. Furthermore, the economics of Medieval Catholicism was concerned not with the credits and debits of the souls of business operators. As R. H. Tawney, one of the great students of the problem, has written:

. . . the specific contributions of medieval writers to the technique of economic theory were less significant than their premises. Their fundamental assumptions, both of which were to leave a deep imprint on social thought of the sixteenth and seventeenth centuries were two: that economic interests are subordinate to the real business of life, which is salvation; and that economic conduct is one aspect of personal conduct, upon which, as on other parts of it the rules of morality are binding. Material riches are necessary . . . since without them men cannot support themselves and help one another. . . . But economic motives are suspect. Because they are powerful appetites men fear to applaud them. Like other strong passions, what they need, it is thought, is not a clear field, but repression. . . .⁵

Thus, what we find throughout medieval religious thought is a pervasive uneasiness with the practices of economic society. Essentially, the Church's attitude toward trade was wary and nicely summed up in the saying, "the merchant scarcely or never be pleasing to God."⁶ In such a traditional society, economic behavior is only one part of the culture. Economic activities are limited by the religious, hierarchical, and other cultural factors. The appearance of modern capitalism should wait until the emancipation of economic behavior from the traditional culture, i.e. the gradual decline of the influence of traditional culture on economic activities.

between the Intellectuals and the Process," in Manning Nash (ed.), *Essays on Economic Development and Cultural Change in Honor of Bert. F. Hoselitz* (Chicago: The University of Chicago Press, 1977), pp. 16-17.

⁵ *Religion and the Rise of Capitalism* (New York: Harcourt, 1947), p. 31.

⁶ Robert L. Heilbroner, *The Making of Economic Society* (Englewood Cliffs, N.J.: Prentice-Hall, 1975), pp. 39-40.

What kind of power makes the traditional society change? According to the theories of German sociologist Max Weber and the English economic historian R. H. Tawney, it was the rise of a new theological point of view contained in the teaching of the protestant reformer John Calvin which provided the causes.⁷

Calvinism was a harsh religious philosophy. Its core was a belief in *Predestination*, in the idea that from the beginning God had chosen the saved and the damned, and that nothing man could do on earth to alter that inviolable writ. In order to make sure that he is one of the elect, Calvinist must work for God for all his life. He should plan his daily life very carefully in order to avoid that one failure may destroy the chance of Salvation.⁸ But how did Calvinism change the attitude of society to be more favorable to the evolution of economic life? In Robert L. Heilbroner's words, "the Calvinists urged a life of rectitude, severity, and most important of all, diligence. In contrast to the Catholic theologians who tended to look upon worldly activity as vanity, the Calvinist sanctified and approved of endeavor as a kind of index of spiritual worth. Indeed in Calvinist hands there grew up the idea of a man dedicated to his work: called to it, as it were. Hence the fervid pursuit of one's calling, far from evidencing a distraction from religious ends, came to be taken as evidence of a dedication to a religious life. The energetic merchant was, in Calvinist eyes, a *godly* man, not an *ungodly* one; and from this identification of work and worth, it was not long before the notion grew up that the more successful a man was, the more worthy he was. Calvinism thus provided a religious atmosphere, that, in contrast to Catholicism, encouraged wealth seeking and the temper

⁷ Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Charles Scribner's Sons, 1930), and R. H. Tawney, *Religion and the Rise of Capitalism* (New York: Harcourt, Brace and Co., 1926).

⁸ See also Han-Yu Chang, "A Study on Modern Entrepreneurship and its Origin in the West," in *The Writings of Dr. Han-Yu Chang (II)—Economic Development and Economic Thought* (Taipei, 1974). (in Chinese)

of a business-like world.”⁹

In the words of R. H. Tawney, this was the theology and ethic of the new system: “The rational order of the universe is the work of God, and its plan requires that the individual should labor for God’s glory. There is a spiritual calling and a temporal calling. It is the first duty of the Christian to know and believe in God; it is by faith that he will be saved The only genuine faith is the faith which produces works The second duty of the Christian is to labor in the affairs of practical life, and this second duty is subordinate only to the first.”¹⁰

Thus, Calvinism did release a great number of forces which were to change profoundly the prevailing religious habits of thought—and in this way affect social and economic ways of living. It is evident that the Calvinist work ethic would eventually produce wealthy people. This would again affect their attitude. Modern capitalism was thus emerging.

Although capitalism is a very popular word, it is very difficult to give a precise definition. According to Max Weber, “Capitalism is identical with the pursuit of profit, and forever *renewed* profit, by means of continuous, rational, capitalistic enterprise. For it must be so: in a wholly capitalistic order of society, an individual capitalistic enterprise which did not take advantage of its opportunities for profit-making would be doomed to extinction.”¹¹ Louis M. Hacker also defined capitalism “as an economic order based on the profit motive: therefore its leading characteristics are the private ownership of the means of production, their operation for pecuniary gain, their control by private enterprisers, and the use of credit and the wage system.”¹²

⁹ *The Making of Economic Society* (Englewood Cliffs, N.J.: Prentice-Hall, 1975), p. 55.

¹⁰ Quoted in Louis M. Hacker, *The Triumph of American Capitalism* (New York: Columbia University Press, 1940), p. 49.

¹¹ *The Protestant Ethic and the Spirit of Capitalism*, p. 17.

¹² *The Triumph of American Capitalism*, p. 16. Different definition of capitalism may refer to Douglas F. Dowd, *The Twisted Dream, Capitalist Development in the United States since 1776* (Cambridge: Winthrop publishers, 1974), pp. 32-52.

Of Course, the change from a society where the business motive was held in suspicion to one which accepted capitalism involved great struggle. The United States of America is now a typical capitalist country. A study of the development of American capitalism is beyond the capacity of this paper. Nevertheless, the secularization of American work ethic, in the sense that the American work ethic was changing from Calvinism to a profit seeking capitalist, provides an interesting case study.

(III)

We may trace back the English exploration of America to 1496 of John Cabot. However, Englishmen did not turn their attention to colonization again until a century later.¹³ The estimated population of the American colonies was only 50,368 in 1650. By 1700, the estimated population reached 250,888. The number of immigrants increased rapidly during the eighteenth century.¹⁴ It is estimated that American population was 2.5 million when American Revolution broke out. The Protestant Reformation was under way during 16th and 17th centuries. Therefore, it is safe to say that a regular and large scale of European immigration occurred only after the beginning of the 18th century. However, in order to facilitate the analysis, we will divide the American history into the following three periods:

- (i) Colonial period (Before 1783)
- (ii) Westward expansion period (1783—1860)
- (iii) Commercialized period (1860—1910)

We know that these three periods of division are quite arbitrary.

¹³ Harold U. Faulkner, *American Economic History*, 8th ed. (New York: Harper & Row, 1960), p. 49.

¹⁴ The number of population in the eighteenth century were as follows: 1725 (0.57 million), 1750 (1.17 million), 1775 (2.5 million) and 1800 (5.3 million). U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957*, Washington, D.C., 1960, p. 756; quoted from Arthur Cecil Bining and Thomas C. Cochran, *The Rise of American Economic Life* (New York: Charles Scribner's Sons, 1964), p. 44.

trary. However, we can describe the important characteristic of each period as follows: The first period is characterized by the British colonization; after defeating her mother country in 1783, America became an independent country consisting of only thirteen states. The most significant characteristic period—from the Revolution to the Civil War—was the rapid westward expansion. The third period, from the conclusion of the Civil War to 1910, was characterized by the important changes in American economic life. It has been generally agreed that the nation committed itself during these years to the economic doctrine of *laissez faire*.¹⁵ The rapid development in the population, income transportation, industrial revolution, finance, foreign market, etc. provided a strong stimulus for economic advancement. Nine-tenth of population was engaged in agriculture at the time of America Revolution; in 1910 the rural population was still more than 50%.

During these three periods of transition, the American work ethic had significant impact, which can be used to explain various contributing factors in the complex process of economic development. In other words, these three periods can measure the strength of the influence of the religion on the pursuit of profit by individuals.

(A) Colonial period (before 1783)

For the first two centuries after the English colonists settled in America, the economic life was essentially agricultural. It was based on a simple technology brought from Europe with some native additions derived from the Indians. Except for a relatively few large plantations, mainly in the South, it was based on the small farm.¹⁶ Therefore, self-sufficiency was the

¹⁵ See Harold U. Faulkner, *American Economic History* (New York: Harper & Row, 1960), p. 575. The reason why the faith of this doctrine was so strong in the period of economic development following the Civil War was, according to Harold Faulkner, in part a reaction from the innumerable government regulations of industry during the Middle Ages which seemed unduly to hamper the rapid expansion of modern commerce and industry.

¹⁶ See James A. Henretta, *The Evolution of American Society, 1700-1815* (Lexington: D. C. Heath, 1973), Chapter I.

main character. There was a scarcity of labor and capital. Domestic market was small due to the difficulty of transportation. Of the white immigrants to the colonies during the colonial period probably half came as indentured servants.¹⁷

Although John Cabot, who was financed by Bristol and London merchants, undertook his first voyages to North America in 1497–1498 European colonization of America was gradually increasing only in 16th and 17th centuries. It was important to understand the motives for the colonization of America. In American historian Harold Faulkner's words, "As the idea was gradually brought home to Europeans that the new found land was not the *India* but two mighty continents, not only did statesmen dream of new empires, and knights and merchants of new sources of riches, but the common man began to think of a new home across the seas where he might escape from the religious political, and economic being often inextricably combined."¹⁸ In other words, everybody has his own dream. It is very difficult to distinguish one factor from

¹⁷ The indentured servants were of two classes—voluntary and involuntary indentured servants. The voluntary indentured servant was one whose servitude was based upon a free contract. Many a person eager to start a new life in America gladly sold himself for a period of from three to seven years to shipmasters or emigration brokers in payment of his passage to America. His length of service depended on his ability to pay part of the passage money or his success in disposing of himself advantageously. The second class of indentured servants, those suffering involuntary servitude, were usually debtors, vagrants, or criminals deported by the courts. The group of indentured servants was also recruited by professional "spirits" or crimps who picked up thousands of children and adults and sold them to shipmasters engaged in the colonial trade. The system of indentured servants helped to solve two problems: It enabled poor men to escape from Europe with a chance of starting life anew in a land of greater opportunities and it provided America with much-needed immigrants and laborers; see Harold U. Faulkner, *American Economic History*, pp. 59-74. Another estimation was that from one-half to three-fourths of the immigrants to the English colonies in the seventeenth century was indentured servants. See Richard Hofstadter: "White Servitude" in Thomas R. Frazier, *The Underside of American History* (New York: Harcourt Brace Jovanovich, 1978), pp. 59-77.

¹⁸ *Ibid.*, p. 38. A more detailed analysis on the motives for the colonization of America can be seen from the same book, pp. 38-40.

the other as to which is more important. However, Faulkner, after a careful analysis, concluded that "it is safe to say that the underlying motive for interest in America on the part of the great majority—whether king, noble, or commoner—was the economic. On the part of the merchant adventurer it was profit, on that of the humble emigrant a chance to find in the New World opportunities for a better life."¹⁹ However, we know that the age of the Reformation was one in which the religious motive was strong. Many people who settled in America desired freedom from religious persecution at home. Two such groups were the Separatists and the Puritans. Religion occupied a very important place in the colonial way of life, though as previously mentioned, the economic motive was a dominant one for the colonization. The following case may present us with a vivid example of how a merchant struggled to a satisfactory balance between religious fulfillment and economic profit-seeking. The following paragraph is an extract from the *Journal* of John Winthrop, the first governor of Massachusetts.

At a general court holden at Boston, great complaint was made of the oppression used in the country in sale of foreign commodities; and Mr. Robert Keayne, who kept a shop in Boston, was notorious-

¹⁹ *Ibid.*, p. 41. Of course, we are very aware that the motives of the European colonization in America were not simple. We did not have a universal opinion about this. For example, Louis M. Hacker argued that the economic and religious considerations were both important. He said: "Apprentices and journeymen, in many of the crafts guilds, realizing the futility of hoping to become independent artisans, were not averse to emigration. Many yeomen, or independent small farmers, who were being oppressed by high taxes and high prices for their necessities, while the prices of grain were being maintained at lower levels, and many small tradesmen who were being declassed as a result of the growing extension of monopoly privileges under the Stuarts: these too turned their eyes westward to seek new chances and new fortunes. The same shaping crisis that provoked the parliamentary revolution against the crown in the 1640's drove thousands of petty-bourgeois families into flight overseas. . . . Economic necessity and religious oppression were closely linked. The Pilgrims, Quakers, Puritans, Huguenots, Moravians, Mennonites, Mystics, and Pietists, coming from England, France, Germany, and Austria, risked the perils of the seas to set up their tabernacles in the wild lands of America; and to find those opportunities for material advancement that were denied them in the older civilizations of Europe." See his *The Triumph of American Capitalism* (New York: Columbia University Press, 1940), pp. 96-97.

ly above others observed and complained of, and, being convented, he was charged with many particulars; in some, for taking above six-pence in shilling profit; in some above eight-pence; and, in some small things, above two for one

After the court had censured him the church of Boston called him also in question where (as before he had done in the court) he did, with tears, acknowledge and beware his covetous and corrupt heart, yet making some excuse for many of the particulars, which were charged upon him, as partly by Pretence of ignorance of the true price of some wares, and chiefly by being misled by some false principles, as 1, that, if a man lost in one commodity, he might help himself in the price of another. 2 that if, through want of skill or other occasion, his commodity cost him more than the price of the market in England, he might then sell it for more than the price of the market in New England, etc. . . . ²⁰

The Keayne case demonstrates that while profit-seeking had already become the dominant factor of the American work ethic during the period under concern, religious constraint was still strong, and would continue to remain so for the next century.

(B) Westward expansion period (1783–1860)

The most important development in America during this period was the rapid Westward expansion combined with a large scale of immigration. During this period, most of the land between the Alleghenies and the Mississippi was taken up, and the advance tide of migration swept into Texas, covered Missouri, and penetrated Kansas and Minnesota. Population increased very rapidly from around 3.9 million in 1790 to 31 million in 1860.²¹ European immigration was a large part of

²⁰ From John Winthrop's *Journal*, edited by J. K. Hosmer (New York, Charles Scribner's Sons, 1908), vol. I, pp. 315-318. The entry refers to November 1639, quoted by Henry William Spiegel (ed.) *The Rise of American Economics Thought* (New York: Chilton Co., 1960), pp. 5-6.

²¹ Also, according to the estimate by Simon Kuznets, the population growth rates per decade recorded the highest during the period from 1800 to 1840 and from 1834-43 to 1869-78, which were 34.1% and 31.5% respectively. See his *Economic Growths of Nations* (Cambridge: Harvard University Press, 1971), table 4, pp. 39-40.

this rapid population expansion.²²

About nine-tenths population still engaged in agricultural activities when the American Revolution broke out. As late as 1880, rural population accounted for 65% of total population. Therefore, our attention will turn to frontier life and farm management.

This began with the independence of America from her mother country. It marked an important watershed from not only the political and economic, but also from the religious point of view. Concretely, many a person settled in America for the reason of seeking a liberty of worship. And one of the great consequences of the American Revolution was the spread of toleration, the disestablishment of churches and decrease of the influence of religion on the lives of the people particularly as it affected profit-seeking. As we have mentioned previously, everybody had different motives. For settling in America, everybody had his dream. And each hoped that his dream could be realized in the New World. There were, in fact, immense opportunities for them to realize their dreams if they could take full advantage of their imagination.²³

²² *European Immigration into the United States, 1801 to 1946-55* (Absolute figures in million)

	1801-20	1821-50	1851-80	1881-1910	1911-40	1946-55
1. Total Flow per decade	0.12	0.82	2.57	5.91	3.46	1.95
2. As % of average population	1.7	5.5	7.2	8.5	3.0	1.3
3. Share in net decennial change in population (%)	5.6	18.0	28.7	42.4	26.2	7.7

Source: Simon Kuznets, *Modern Economic Growth* (New Haven: Yale University Press, 1966), table 2-4, p. 52.

The figures in the above table indicate that the absolute number of immigrants was increasing before 1881-1910 in terms of total flow per decade. The most significant fact worthwhile to point out is the high share of immigrant in net change in population.

²³ However, many dreams were failed to realize. The stories of European settlements in the New World can be described in a recent book on the history of the American people, Professor Bernard Bailyn et al said: "The history of their migration and resettlement in America forms not one narrative but many. Yet these stories of colonization, for all their variety, follow a common pattern.

The guarantee of the freedom of worship and the dissolution of the authority of an established church gradually released people from the confinement of churches. This provided a freer climate for, as Louis Hacker stated, “developing a life and rhythm of their own, largely self-perpetuating, up to the nineteenth century finding it possible to receive and hold property without danger of alienation.”²⁴ Therefore the climate was more favorable for capitalist development.

On the other hand, this stage characterized an unlimited supply of good cultivatable land with the shortage of labor and capital.

A large number of immigrants were coming to the unsettled frontier. One particular phenomenon of American farming was the frequency with which American farmers moved. From the viewpoint of profit-ability, farmers may have made more money from buying and selling land than from raising crops. Thus, there were many farmers who bought land and improved it with an eye to resale. The large amount of unoccupied land and the ease with which it could be acquired created a restless, moving people. What they were seeking was a high profit, not a high productivity of land. As Faulkner has stated, “Some men repeated this process a half-dozen times in the course of their lives—almost professional pioneers, who broke the way for more permanent home builders.”²⁵

They begin with high hopes and great plans – often utopian plans – designed by sponsoring individuals and groups whose imaginations were fired by the possibilities of starting the world anew, of creating new communities, and profiting immensely by doing so. But contact with reality in an underdeveloped land brought frustration, failure of original high hopes, and disillusion. Thereafter, however, there was a creative adaptation by those who survived. This was the persistent pattern of English colonization in the seventeenth century, soaring expectations, disappointment, frustration, disaster or near disaster, and then a slow adjustment to the grinding realities of life on the wilderness edge of the North American continent. Gradually, from this process, there emerged new forms of society made more complex by their superficial similarities to the familiar patterns of European life.” *The Great Republic – A History of the American People*, vol. I (Lexington: D. C. Heath and Co., 1977), pp. 36-37.

²⁴ *The Triumph of American Capitalism* (New York: Columbia University Press, 1940), p. 4.

²⁵ *American Economic History*, p. 185.

Land speculation seemed very popular in the movement of Westward expansion. The following statement by an Englishman, exaggerated as it may be, provides a picture of this:

Speculation in real estate has for many years been the ruling idea and occupation of the Western mind. Clerks, labourers, farmers, storekeepers, merely followed their callings for a living, while they were speculating for their fortunes. There are no statistics which show how many Yankees went out to buy a piece of land and make a farm and home, and live and settle, and die there. I think that not more than one-half percent of the migration from the East started with that idea; and not even half of these carried out the idea. The German immigrants, indeed, were better entitled to be called settlers; but all classes and people of all kinds agitated and unsettled, and had their acquisitiveness perpetually excited by land speculations in some shape or other — new railways, roads, proposed villages and towns, gold mines, water-powers, coal mines — some opportunity or other of getting rich all at once by a lucky hit

In the United States, vast numbers of the population became excited with dreams of sudden wealth, and the idea of a life of labour was scouted as the suitable destiny of mere timid, non-enterprising, weak people, or plodding Dutch or English, but altogether beneath the notice of young America

By convenient laws, land was made as easily transferable and convertible as any other species of property. It might and did pass through a dozen hands within sixty days, rising in price at each transfer; in the meantime producing buffaloes and Red Indians. Millions of acres were bought and sold without buyer or seller knowing where they were, or whether they were anywhere; the buyer only knowing that he hoped to sell his title to them at a handsome profit.²⁶

Although we know that in certain areas of the east coast there were many farmers who had much permanency of

²⁶ D. W. Mitchell, *Ten Years in the United States* (1862), p. 325, quoted in Harold U. Faulkner, *American Economic History* (New York: Harper & Row, 1960), pp. 198-199. As to the trait of American farmer, Thorstein Veblen had an interesting discussion, see his *Absentee Ownership and Business Enterprise in Recent Times—The Case of America* (New York: B. W. Huebsch, 1923) pp. 129-141.

ownership, and who produced crops for self-consumption or even for market, the previous analysis seems to provide a picture describing the farmers' profit-seeking behavior. In the remote frontier, the influence of religion naturally declined. When people pursued profit, the possibility of Church's interference like Robert Keayne case mentioned previously was very small.

During the period from 1783 to the outbreak of the Civil War three great developments in American agriculture stood out. First of all, there was the great expansion of the farming area. Secondly, there was a rapid development of agricultural specialization in which specialized commercial agriculture was gradually taking the place of the self-sufficient farm which used to be dominant. Finally there was the real beginning in America of scientific agriculture and the mechanization of farm methods.²⁷ Therefore, this period may be also characterized as a rapid transformation from a traditional agriculture to a modern one. Agricultural specialization in crops and products was still limited by the market and transportation. Thus, the pressure to use agricultural mechanization and scientific farming was not necessary in all the regions and crops. This necessity became stronger during the third period.

In brief, the role of imagination was very important in the process of frontier expansion. This can be demonstrated by the creation of various methods to overcome the difficulties they met in the frontier life. However, this frontier expansion was encouraged mainly by the profit-seeking motive. The religious confinement as to the profit seeking and property acquisition was no more significant.

(C) Commercialized period (1860—1910)

The half-century from 1860 to 1910 witnessed an agrarian revolution which included both the introduction of agricultural machinery and the increased adoption of scientific farming. In

²⁷ Harold U. Faulkner, *American Economic History*, p. 216. See also Arthur C. Bining and Thomas C. Cochran, *The Rise of American Economic Life*, especially Chapter 12.

circumstances of chronic labor shortage, there was always a need for increased machinery to substitute for human labor. This was a new situation which the European experience had never prepared people for. Hence, creative capability was very important. The incentive to solve the shortage of labor was very strong. However, increased production hardly paid if the product could not be shipped to the market. The precipitating cause for the gradual adoption of agricultural machinery was the development of marketing facilities. The rapid expansion of domestic transportation during this period was the crucial factor.

Undoubtedly, farm production was not for self-consumption but for market sale. The price of products and the cost of inputs could determine the profitability of farming. Therefore, "the farmer was emerging as a business man, and by the end of the (19th) century he was a full-fledged entrepreneur."²⁸

Because of the increase in domestic and foreign market on agricultural products and the improvement in domestic and international transportation, the market demand increased. How to produce sufficient supply to meet the demand was the problem the farmer faced and wanted to solve. As we know, production requires labor, land, and machinery. Given available land and labor was scarce, the incentive of innovation would tend to save labor and use machine. Of course, there were many problems farmers had to face and solve. The following case provides a good example of how American farmers solved their problems.

The climate in its wheat regions of the Middle West necessitated rapid harvesting when the crop was ripe, and the amount planted was dependent upon the farmer's ability to harvest before the grain spoiled. Consequently, the attention of investors was directed most of all toward methods to speed up harvesting. Already in 1858 C. W. and W. W. Marsh had patented the "Marsh harvester," a reaping machine which, by means of an endless apron delivered the

²⁸ E. A. J. Johnson and Herman Kross, *The Origins and Development of the American Economy*, p. 264.

grain upon a table where two men could bind it. This reaper almost doubled the amount of grain that could be harvested in a given time. Even more important was John F. Appleby's invention in 1878 of a "twine binder", a machine which took the place of the crude and unsatisfactory wire binders in use and increased eight-fold the speed in harvesting. "The invention of the twine binder, therefore," says Professor Carver, "by increasing the amount which a farmer could harvest, increased by that precise amount the quantity which he could profitably grow. In other words, it was the twine binder more than any other single machine or implement that enabled the country to increase its production of grain, especially wheat, during this period. The per capita production of the country as a whole increased from about 5.6 bushels in 1860 to 9.2 bushels in 1880."²⁹

In the third period it has been demonstrated that the spirit of modern capitalism was undoubtedly found in the management of farming. Farm production was for market which primarily based on the calculation of profitability. To meet their competitors, farmer should try to lower the cost of production, and improve the efficiency. Religious considerations no longer existed in the farm management. However, we know that American farmers had highly used their imagination and developed various useful machinery to overcome the obstacles of natural environment and increase productivity.

(IV)

In this paper I have suggested that the relationship between religion and the capitalist work ethic changed in American economic development. The evidence I have presented leads me to conclude that the question of the work ethic can be broken down into three stages. In the first, religion is dominant and the linkage to capitalism is rather trivial. In the second, a new secular individualist ethic emerges—conditioned by a frontier consciousness. In the third stage, this individualist

²⁹ T. N. Carver, *Principles of Rural Economics*, p. 99, quoted in Harold U. Faulkner, *American Economic History*, p. 369.

ethic is tempered by economic realities and the needs of technological innovation. This process of transformation from the first to the third period involved the solution of many difficulties. This, undoubtedly, required high imagination of the American people. Their work ethic changed in the process. In 1910 it was secular rather than religious and predominantly profit-seeking rather than god-seeking.

從喀爾文主義到資本主義： 美國人工作倫理之世俗化

(摘要)

吳 榮 義

美國是目前世界上最富裕的國家，因此美國經濟發展之歷史曾經引起許多學者的研究興趣。由於美國歷史很短，其祖先多來自歐洲，因而研究美國經濟發展史就不能忽略歐洲的影響。實際上，這些移民把他們的傳統從歐洲帶到美國，經過一段時期之後，已逐漸轉化為「美國式」的。對這問題之看法，一般認為馬丁路德 (Martin Luther, 1517—1586) 及喀爾文 (John Calvin, 1509—1564) 二人引起的宗教改革對於歐洲及其他地區工業革命具有決定性的影響。歐洲人移民美國結果，把喀爾文主義帶進美國；可是喀爾文主義是一種十分嚴格的宗教哲學，其特徵是一方面視職業為上帝所賜，也就是天職的思想，另一方面是產生了營利的作風。美國目前是世界上資本主義盛行的國家，如何從喀爾文主義轉變為資本主義是本文分析的重點。我們可把美國歷史按重要事件分成三階段：(一)殖民時期(1783年以前)，(二)西部擴張時期 (1783—1860)，(三)商業化時期 (1860—1910)。在第一階段，美國人雖追求利潤，但宗教之限制力量相當大。到第二階段，移民向西部開拓，但由於從事土地之開墾及出售比從事農耕之利潤更大，因而產生許多專事開拓土地以供出售之拓荒者。此時，宗教之影響力已式微。到了第三階段，農民逐漸採用農業機械及新的耕種技術，以增加收益；在農業經營決策過程中農民已不再考慮到宗教因素，而以所獲利潤高低作為決定因素，此時美國社會便逐漸完全進入資本主義社會的階段。