"If we could only realize it, these are the best times we ever had"

The Business Strategy of the Ford Motor Company during the Great Depression

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Abstract

In 1929 Henry Ford, the most successful business leader of the early 20th century, has recovered from a serious business crisis and has regained market dominance again, which he held in the early 1920s. The future seemed to be prosperous, for the company as well as the country. But later in the same year the situation completely changed, and an economic downswing started, which later became known as the Great Depression. Ford at first resisted to react to the crisis in a way different to his usual strategies (increasing wages and decreasing prices). But later he developed more creativity and accepted another model change and various forms of cost cuts, mainly hidden from the public. Nevertheless his image was damaged by some serious conflicts and a climate of fear at the company. Thus in the end, Ford was successful in surviving the Depression, but he performed worse that his competitors.

Key Words: economic history, business history, Ford Motor Company, Great Depression, business strategy

JEL Classifications: N62, N82, L62, J01, M00

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Introduction

In 1930, after the economic crisis later to become known as the "Great Depression" had developed fully, Henry Ford published his third autobiography.[2] The title was "Moving Forward", and the title to some extend was the essence of Ford's business philosophy. Nevertheless it could not have been more displaced in an economic situation steadily aggravating to the low point of a crisis.

Nevertheless, the situation generally was not perceived as dramatic as it later turned out to have been. Furthermore the Ford Motor Company, at least between 1913 and 1927 was the most successful car company on the globe, and its founding father, Henry Ford, possibly was perceived by a global public as the most successful businessman ever (in the 1990s, he was declared "man of the century" by *Fortune*, which obviously has forgotten that in 1933 it had declared Henry Ford as the "world worst salesmen"). Then things changed and at the end of the 1920s Ford only recovered slowly from a serious setback in sales by a fundamental change in its business strategy. At that moment of recovery, the Great Depression evolved, at first ignored or even welcomed by Ford. Thus he resisted another restructuring for long being – at first – not hit that hard than his competitors (like General Motors and Chrysler) were. But at least when sales dramatically declined in 1932 he had to look for – in his view – unconventional strategies to overcome it.

This study is mainly a historical one about one of the globally leading companies of the early twentieth century and its attempts to keep this position in spite of powerful competition and a general economic decline. It is even more interesting, because the Ford Motor Company can be regarded as the possible single most important driving force of mass-mobilisation and thus an essential contributor to the radical economic transformation of the early 20th century. Furthermore, the study is particularly interesting for analysing the influence of one single person on the strategy of a company.

The Great Depression

In October 1929 the "Black Thursday", the crash at New York Stock Exchange, came as a shock with long-lasting consequences for the world economy. It nevertheless hardly came as a complete surprise because some signs of financial crisis could be observed earlier the same year and even the year before. But what followed the crash was a period of four years with serious economic problems all over the world. The literature on these problems, soon summarized as "Great Depression", is voluminous, Because it is not the main purpose of this paper to discuss the Depression as such, we only refer to some of the

[2] The other two were published in 1923 (My Life and Work), last but not least to document how Ford managed the serious crisis of 1921, and 1927 (Today and Tomorrow), short after the heyday of the FMC, and all three were actually written by Samuel Crowther.

most important works, like Kindleberger (1973), Haberler (1976) or Temin (1989) and recommend these for a general overview.

The Great Depression was a worldwide economic downturn, starting in 1929 and lasting through most of the 1930s. The United States were the centre of the depression, but it spread to other countries and so the Depression was truly a "world-shaking event" (Haberler 1976, 38). The whole period from 1922 to 1928 was relatively prosperous, industrial output doubled from 1921 to 1928 (van der Wee 1972, 5). Optimism was omnipresent and the American president, Herbert Hoover, told in his acceptance speech 1928: "In America today we are nearer a final triumph over poverty than in any land. … We shall soon with the help of God be in sight of the day when poverty will be banished from this nation." (Hoover 1952, 343)

But what as well preceded the Depression was a considerable drop in agrarian prices between 1925 and 1929 by about 30 per cent (Kindleberger 1973, 87). Consequently the agrarian periphery of the world economy faced a crisis, aggravated by the decrease of financial flows from the centre. In spring 1928 the Federal Reserve raised the interest rate from 3.5 to 5 percent in order to dam up the stock exchange speculations, which reduced credit offering through banks and slowed down economic growth (Temin 1993, 89). But the stock exchange did not really start declining sustainably before October 3, 1929 (Kindleberger 1973, 69-70). The already well established global surplus of agricultural products caused falling prices for agricultural products as well as bank failures (Kindleberger 1973, 90-93). But neither purchase of stocks by some banks, nor the reduction of the interest rate to 4.5 percents and the expansive open market policy could slow the downturn (Kindleberger 1973, 122-3).

Although the beginning of the depression is usually associated with the crash at the New York Stock Exchange in October-November 1929, the decline in output and employment already started in August 1929 (Haberler 1976, 8-9). The dramatic devaluation of stock value and shrinking consumer confidence reduced industrial output further (Bernstein 1987, 106). The stock exchange crash caused increasing liquidity preference, reduced orders and cancelled loans. The expectations about future economic development were reduced and new investments and consumption went down (Temin 1989, 56). In November 1929 Herbert Hoover reduced taxes and advised companies not to reduce wages and to invest further. But this fiscal policy was not persistent and the interest rate was reduced up to 1.5 percent in May 1931 (Kindleberger 1973, 142). Hoover on the contrary increased tariffs in order to prevent domestic economy and introduced the Smoot-Hawley tariff in July 1930 (Kindleberger 1973, 78). This initiated wide-spread retaliation and hence reduced international trade (Archibald/Feldman 1998, 873).

According to the rules of the gold standard, the countries had to use deflationary policy in case of foreign trade deficits. This of course increased deflation and deepened the crisis (Eichengreen/Temin 1997, 24, 32). Another problem was that rivalry was growing among central banks, but cooperation was vital under the rules of the gold standard (Eichengreen 2000, 57). The departure from the gold standard of England and devaluation of the pound in 1931 then put heavy deflationary pressure on its remaining members (Haberler 1976, 11). Due to losses of gold caused by the devaluation in Europe the United States had to increase the interest rate from 1.5 to 3.5 per cent, which further deepened the crisis (Kindleberger 1973, 177-8). Because of the continued gold losses, the United States liquidated the gold-exchange standard in June 1932 (Kindleberger 1973, 194).

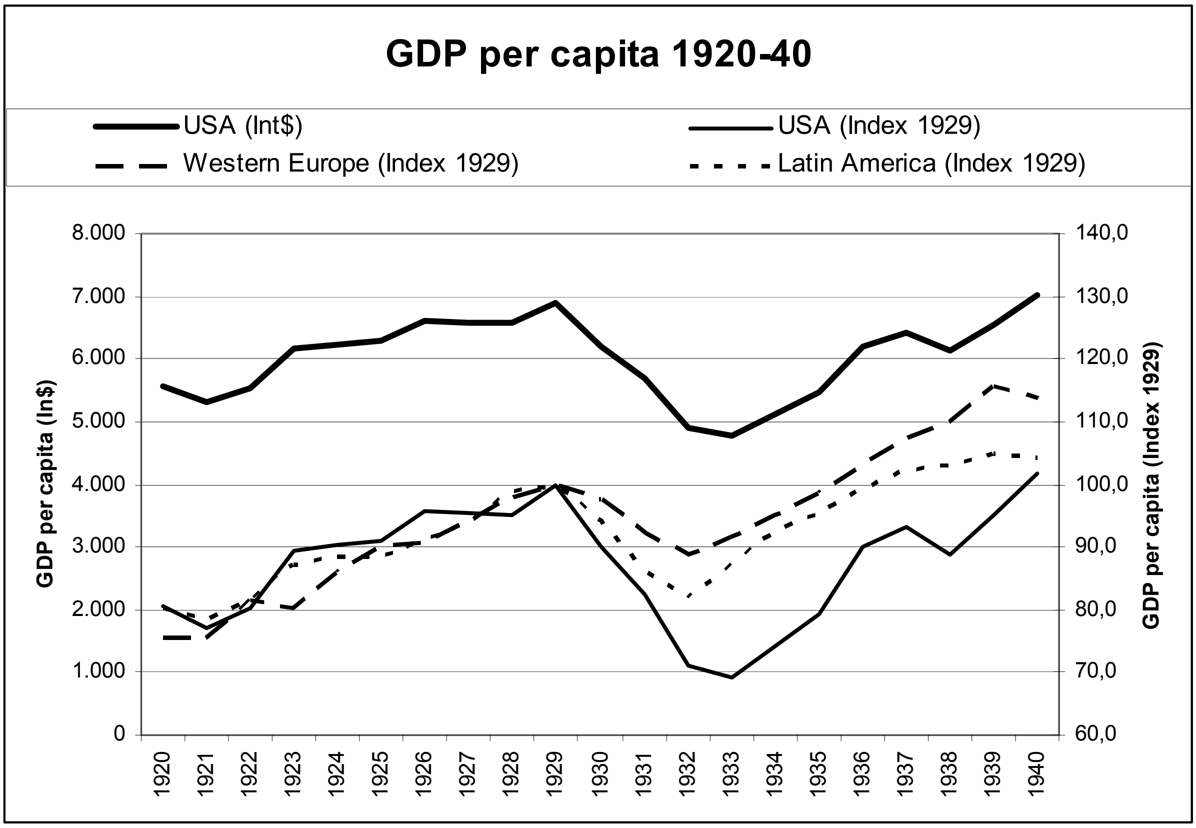
Apart from the stock exchange crash the downturn at first seemed to be an ordinary recession (Cooper 1992, 2124). But the downturn grew into the Great Depression from the beginning of 1931 until March 1933. The adherence to balanced budgets worsened the situation, but Hoover said in Mai 1932: "Nothing is more necessary at this time than balancing the budget" (Hoover 1952, 139). Therefore both monetary and fiscal policy were restrictive in the early 1930s and a lack of confidence was a further problem (Temin 1989, 28). Hence, net investments were negative from 1931 to 1935 and in 1932 even gross investment was almost nil (van der Wee 1972, 136). Several bank runs further worsened the situation and on March 4, 1933, banks were closed for some days (Kindleberger 1973, 208).

The number of unemployed people increased from 1.6 million in 1929 (which was 3.2 per cent) to 12.8 million in 1933 (which was 24.9 per cent). When Franklin D. Roosevelt became president in 1933, he started an expansionary policy and moved towards planned economy (Temin 1989, 89). According to Temin the following change of expectations was the key to recovery (Temin 1989, 150-1). Roosevelt introduced minimum wages, production controls, price regulations and the right to organize in unions (Anderson 2000, 140-4). Government spending was increased and jobs actively created. Already in April 1933 the convertibility of the Dollar to gold was abolished, which actually ended the so called "second" gold standard (Eichengreen 2000, 125). Now the Federal Reserve and the national government were liberated from obligations to keep the gold parity. Consequently, in April and May the interest rate was reduced from 3.5 to 2.5 percent (Temin 1989, 98), leading to a devaluation of the Dollar. The economy remained rather stable until another, more short-lived outburst of the crisis in 1937 and 1938.

Scholars do not agree on the exact causes of the depression and their importance. According to Kindleberger none of those responsible knew what they did. They only followed the cliché of balanced budgets and adherence to the gold standard (Kindleberger 1973, 22). In the 1930s the view that serious maladjustments and distortions together with the increasing rigidity and lessened adjustability of the economic system were largely responsible for the exceptional severity and length of the depression was widely held (Haberler 1976, 21). According to Schumpeter the Great Depression was not an ordinary cyclical downswing. Its extraordinary severity and length was due to "adventitious circumstances", the combination of weak monetary institutions and horrendous policy mistakes (Haberler 1976, 39). Haberler also stressed the importance of the downward rigidity of wages in face of deflation (Haberler 1976, 40). Friedman stresses the importance of reduced money supply and mistakes of the Federal Reserve System, while Keynes emphasizes reduced investment and Bernanke accents the debt-deflation theory and increased real debts because of decreasing prices.

To finally give a more vivid picture of the Great Depression, some interesting figures and tables shall be provided on the following pages.

Figure 1: Real GDP per capita, annual growth rate 1920-40, selected countries



Source: Data-CD to Maddison (2001), own calculation

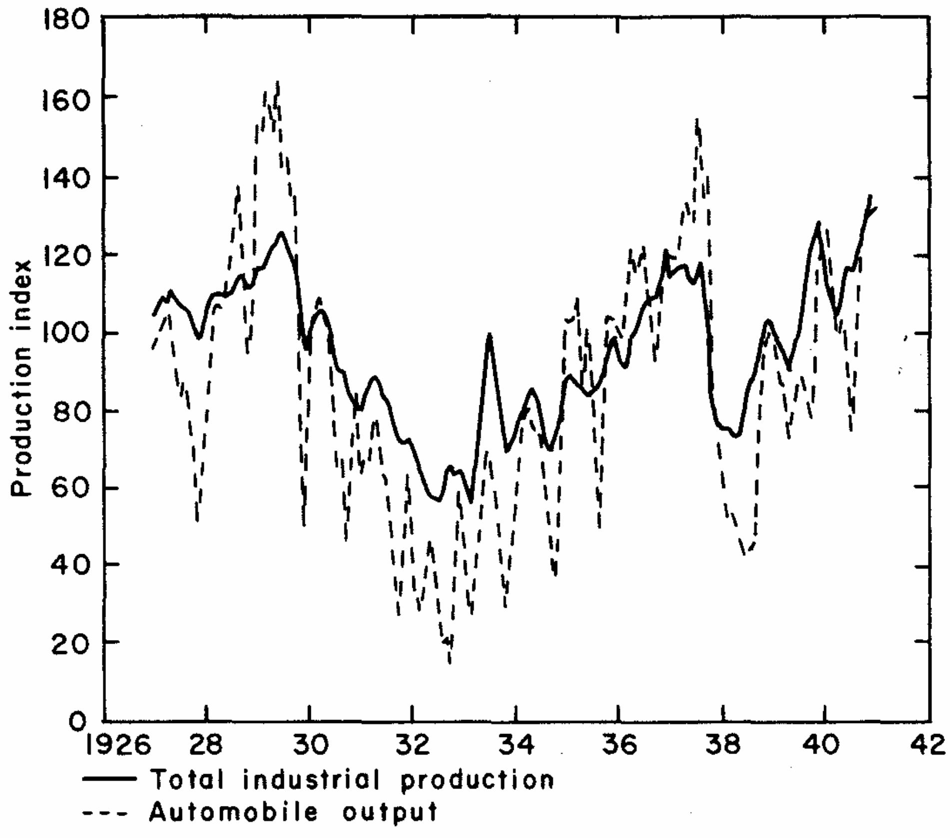
Table 1: Real GDP per capita, annual growth rate 1925-35, selected countries

	USA	UK	France	Germany	Denmark
1925	0,8	4,5	-0,3	10,4	-3,3
1926	5,1	-4,1	2,0	2,1	5,0
1927	-0,4	7,7	-2,2	9,3	1,3
1928	-0,1	0,8	6,7	3,8	2,7
1929	5,0	2,7	6,3	-0,9	6,1
1930	-9,9	-1,1	-3,8	-1,9	5,2
1931	-8,4	-5,6	-6,5	-8,1	0,3
1932	-13,8	0,2	-6,5	-7,9	-3,5
1933	-2,7	2,5	7,1	5,8	2,3
1934	7,0	6,3	-1,1	8,5	2,1
1935	6,9	3,4	-2,5	6,8	1,4

Source: Data-CD to Maddison (2001), own calculation

The data shown here refers to real GDP estimates by Angus Maddison, who has provided the possibly best historical time series of GDP in Maddison (2001). One can easily see from figure 1 that the overall loss of wealth added up to 30 per cent in the U.S., in the 1920s and 1930s already the wealthiest nation of the globe, while other regions were hit less hard. Recovery as well started later and took longer in the U.S., where pre-crisis levels were only achieved again in 1940 (in Western Europe already ion 1935). However, the drop in nominal GDP was even severer. In the United States for example, deflation added up to a 25 per cent decrease of CPI from 1929 to 1933, hence nominal GDP per capita decreased by almost half between 1929 and 1933 in the United States.

Figure 2: Automobile Output and Total Industrial Production (Index 1939)



Source: Bernstein (1987), 92.

While the economy as a whole was hit by the Depression, the car industry as provider of a luxury good (which cars still were, at least to a certain extent) was even hit harder. From figure 2 it can bee seen that there is considerable seasonal volatility in this industry, but in general there was a relative boom until 1929, but in this year an extreme drop occurred. At the beginning of 1933, while total industrial production has decreased by half compared to the pre-crisis maximum, car production dropped by more than 85 per cent. From that low point on, recovery took some time (induced by the obvious New-Deal-peak in 1933), until another contraction, only slightly less sever, occurred again in 1937 and 1938.

One of the mayor problems at the beginning of the Depression was that the car market was flooded by used cars, what reduced sales of new cars dramatically (Nevins/Hill 1957, 570). And from 1930 to 1932 automobile sales decreased much more than income (30 per cent compared to 10) (Nevins/Hill 1957, 574). In 1930 alone, a quarter to a third of all car producers had to leave business (Nevins/Hill 1957, 571). In 1931 all car companies produced at only a third of full capacity (Nevins/Hill 1957, 584). Hence, Detroit as the car capital of the United States was particularly hit be the Depression (Brinkley 2003, 381-2). At the beginning of 1932 one third of the working population of Michigan was partially or fully unemployed from at least the beginning of 1930 on (Sward 1948, 223). And the situation worsened later that year in the Detroit area because the other car producers closed their factories, when Ford announced the new V8 in February (Brinkley 2003, 389-90). As an overall result, particularly the small producers, unable to close down some of their factories (because they only possessed one) and dependent on qualified labour ran out of business during the Depression (Breshnahan/Raff 1993, 20-1). While small producers in 1925 accounted for 25 per cent of total production, in 1933 they were down to 10.5, and also the number of profitable companies decreased dramatically (Nevins/Hill 1963, 4-5). But in 1932 even the "big three" faced losses: General Motors $4.6 million, Chrysler $10.2 million, and Ford $70.8 million (Nevins/Hill 1963, 5).

Table 2: Census data from the U.S. car industry 1929-35

	1929	1931	1933	1935
Establishments (number)	211	178	122	121
Nominal value of products (in $ millions)	3,710	1,568	1,097	2,391
Real value of products (in 1929$ millions)	3,710	1,806	1,470	2,926
Vehicles produced (in millions)	2.70	1.62	1.12	1.76
Real wage bill (in 1929$ millions)	364	181	139	266

Source: Breshnahan/Raff (1991), 322

The data from table 2 speaks for the disastrous situation in the car industry in general. All numbers, the number of vehicles, their real value, the real wage bill, went down by 60 per cent and more, hence producers as well as employees really suffered. Nevertheless the situation was rather different for certain producers, which can partially be seen from figures 3 and 4 in the next section.

The Ford Motor Company

There is much that could be said about the Ford Motor Company, one of the definitely most important business ventures of the 20th century, and about its founding father, Henry Ford (1863-1947). The main sources for the business history of the Ford Motor Company (besides a rich archive in Dearborn) are the three volumes produced by Alan Nevins after the its 50th anniversary (Nevins/Hill 1954, 1957 and 1963). A much shorter (but with respect to time extended) version of history was produced for the 100th anniversary by Douglas Brinkley (Brinkley 2003). Most close to the time of the Depression is a rather critical book by Keith Sward, published immediately after Henry Ford's death (Sward 1948). Clearly, the three autobiographies of Ford are as well extremely valuable to get insights into the business philosophy of the tycoon. Although there are a lot of redundancies in these books, they provide Ford's perception of the actions he had taken, or at least they show how he wanted them to be perceived (his image was always important for Ford), which also could be contrasted by additional information from other, more neutral sources (Ford 1923, 1927 and 1930).

The company itself was founded in 1903, became a family business in 1919, and was practically led by Henry Ford until 1945, when he was already 82. While Ford – born on a farm, but always much more interested in mechanics – was a self-made man and started his career with at the enterprise of Thomas Edison in the 1890s, his entrance into the car business was not without problems. During the first years only some thousands cars were produced annually, but Ford was one of the big players from the beginning on. Nevertheless, success can when Ford convinced his partners from his idea of producing cheap cars for being able to sell a lot of them, and for cutting costs by standardizing production. Consequently, from 1908 on Ford only produced one model (without much varieties), the famous model T. When Ford won a patent trial in 1911 (the Selden-trial), by which he proved his ardent dislike of cartels and monopolies to the public and earned a lot of support for it, he was liberated of the threat of having to pay a license fee simply for producing a car.[3] Nevertheless this trial was the first existential crisis of the company.

The next step came with the introduction of the assembly line in 1913, when the number of cars produced was raised from tens of thousands to hundreds of thousands within a few years. World production, which was mainly U.S. production these days, exceeded one million cars for the first time in 1915. Then Ford had already taken another very unconventional measure: he introduced the $5-day, which doubled wages in the industry and reduced the turnover at the Ford Motor Company considerably. But the main purpose of this measure – besides earning publicity and improving Ford's image even more – was to inject purchasing power into the market. Ford's philosophy, which later became known as "Fordism", was essentially about enabling the workers to buy the goods they produce and by that building up ones own market.

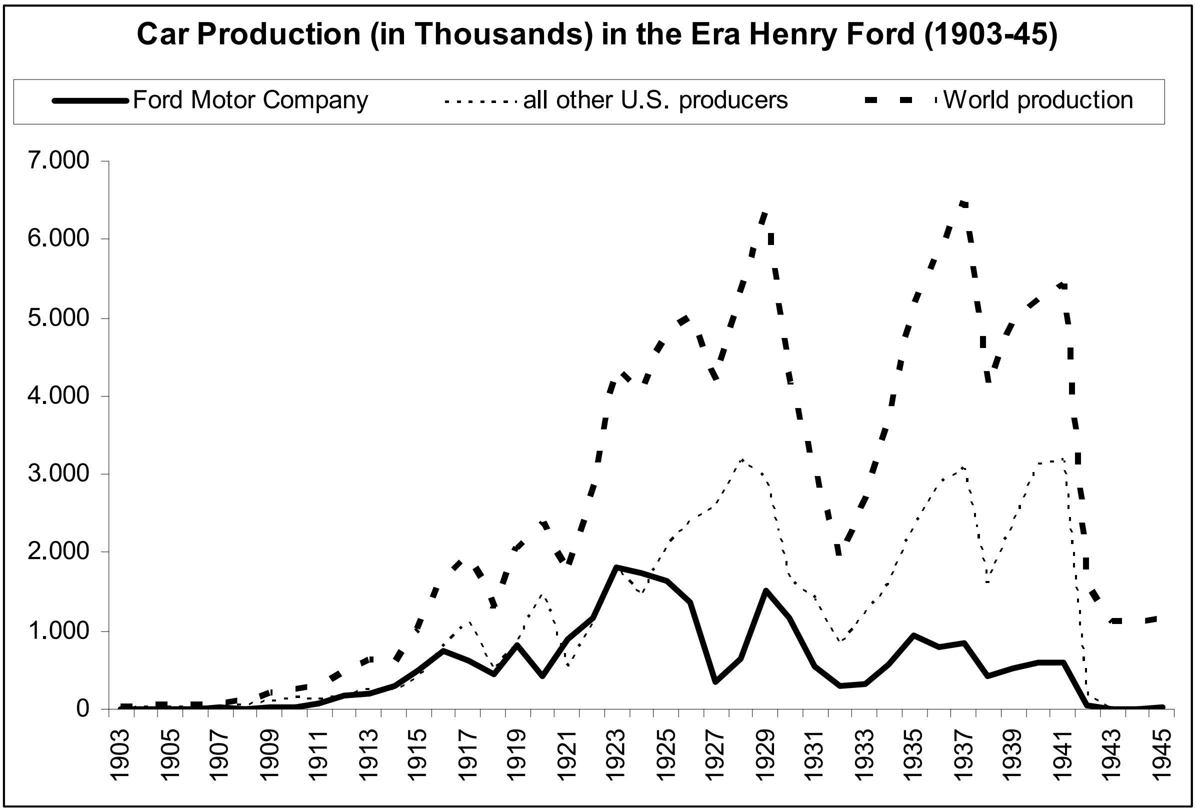
After some very successful years, when Ford's share of U.S. production (and hence of world production) exceeded 50 per cent several times, Ford faced another existential crisis in the late 1910s. His partners went to court for higher dividends (in fact, to get dividends at all, because Ford usually reinvested all profits). Ford avoided to pay them dividends by buying their shares, sometimes in a clandestine way. From 1919 on thus he was in full possession of his company for the first time in history. And this only to face another crisis: the post-war depression of 1919-21 hit the car industry particularly, and it was necessary to reduce overcapacities. Although he recovered simply by closing his factory for some

[3] The Selden-trial was about a patent for a "road-locomotive" which was seen as covering cars as well.

weeks in1920, Ford was successful and rather proud of his crisis management, which can be seen from his first autobiography (Ford 1923). As can be seen from figure 3, while Ford increased his production in 1921, the rest of the U.S. car industry had to cut it by half. Consequently, Ford achieved a production share of more than 60 per cent in the U.S. (which remained at more than 50 per cent until 1924), and for the second (and last) time in history of more than 50 per cent of the world.

The year 1925 marked something like the heyday of the company. Almost 38 per cent of all cars running on the planet were Ford model T, and Henry Ford himself was extremely popular all over the world. In 1924 he even had played with running for presidential election (fortunately for Calvin Coolidge, he decided otherwise). Profits were extraordinary and prospects for the company seemed extremely bright. Ford was engaged in a lot of ventures and practised vertical integration (sources of raw materials, production of intermediaries, means of transport), almost everything seemed to pay. Consequently, Ford was absolutely convinced that his company could not be harmed by external forces and that all crisis and problems in an enterprise in the end emerged from business failures within it.

Figure 3: Car production of the world, the U.S. and Ford 1903-45

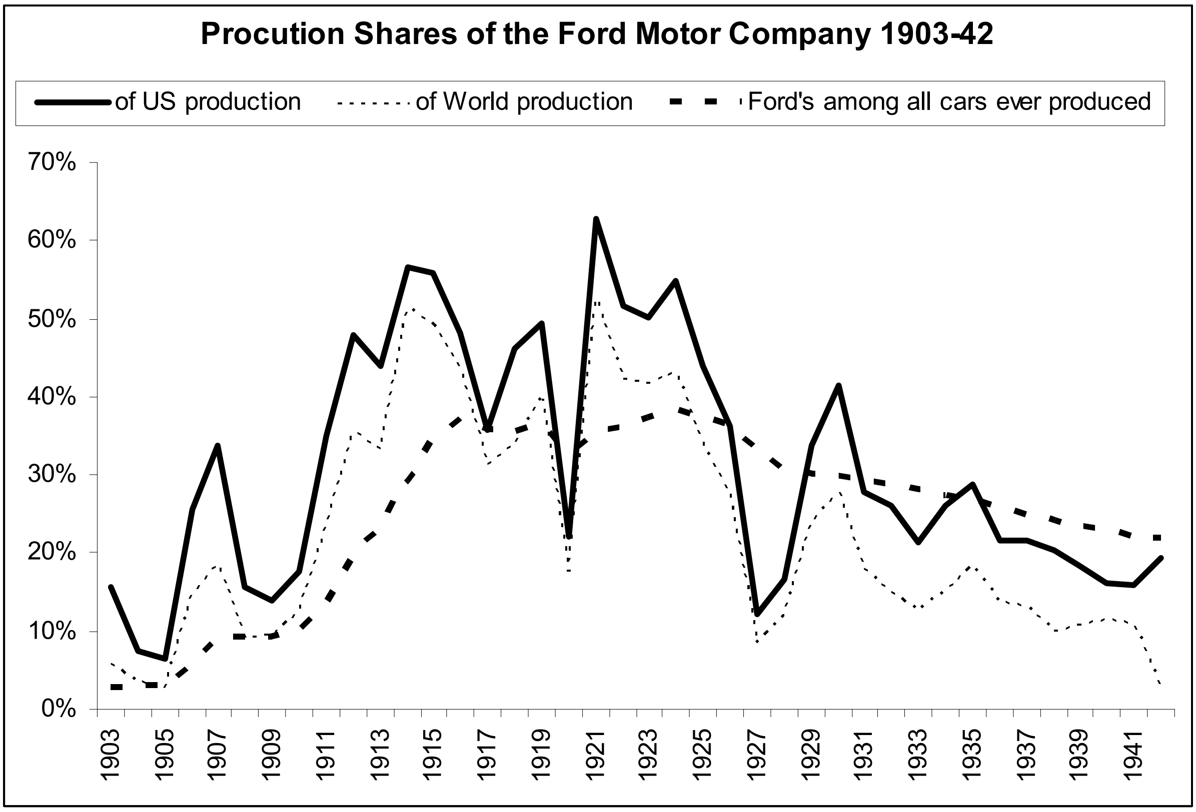


Source: IRSG (1996), 44-51; Nevins/Hill (1963), 478-9

Although production numbers went down from 1923 on, Ford's confidence war not put to test before 1927 and 1928, when people simply stopped buying model T (of which all in all more than 15 million were sold). Instead of almost two million cars annually in 1927

Ford sold less than 400,000. The main reasons were two changes in the market: General Motors was successful in introducing the year-to-year change of models, hence costumers demanded design and extra equipment, which became increasingly important, hurting Ford sticking to his one and only variety; secondly used cars became increasingly available and a second hand market developed which again particularly hurt producers in the low price segment (Ford has over all the years constantly cut prices).

Figure 4: Production shares of Ford 1903-45



Source: IRSG (1996), 44-51; Nevins/Hill (1963), 478-9 (own calculation)

Because of the crisis of model T Ford lost more than $100 million in 1927 and 1928, and he had to cut employment by more than 50,000. But his restructuring of the company proved successful, the introduction of model A earned profits, and Ford gained $91 million in 1929 and could raise employment again by 70,000. Hence in 1929 everything looked bright again.

Ford's main idea about the economy was rather simple: crisis is always a result of bad management by business leaders, which are not working hard enough or become nervous. What in his opinion makes a good business is pointed out clearly in all his books: (1) produce a growing number of goods of highest quality as efficient as possible; (2) keep on going for better quality, cheaper prices, and lower costs; (3) increase wages steadily and sustainably; and (4) supply the goods as efficient as possible. The essence of this business philosophy, a concept which later was labelled "Fordisms" to cover a much broader scope of ideas, was that of the so to speak "self-fulfilling market": it is the purpose of a business leader to cut costs by technological advances and an increase in production efficiency, which leads to lower prices of the final product, and at the same time to equip the workers with high wages and enough spare time to be able to consume these final products. Hence the philosophy is twofold: focus on servicing the consumer and be aware that your workers are consumers as well, and particularly the dynamic of increasing wages and decreasing prices will put pressure on business to improve production efficiency: "I would rather put ten men to work at $7 a day than twenty men at $3.50, because the $7 men would have a surplus to spend which would put other men to work, while the $3.50 men would be barely living. The higher the wage the greater the purchase power and the wider the variety of work that is set in motion." (Nevins/Hill 1957, 575)

This credible essence of Ford's business philosophy can also be seen by another quote from the New York Times, stated just in the middle of Depression in February 1932: "The American people have made the Ford Motor Company what it is. We have nothing the public did not give us. No surplus exists for personal benefit – every surplus is provided for future use. The future is here and we are going to do our utmost – risk everything, if necessary – to use this surplus which the public, through its dealings with us, has provided, to see if we cannot make what the country needs most – work, jobs!" (Brinkley 2003, 389)

But also two important problems were closely connected to Henry Ford's character, reflected in his self-perception of being the patron of a family empire. The first one was that people admired him for being able to solve problems and direct the course of an enterprise that great than the Ford Motor Company. But at the same time he was perceived as fully responsible for everything going on in this company. Hence, if something did not work well, his image was damaged as well. This problem of Ford's image aggravated during the Depression. Generally his image as "compassionate capitalist" was seriously damaged (Brinkley 2003, 392). Being first in sales in 1929, he was surpassed by General Motors (already better in profits) and even by Chrysler until 1933. This was also due to informal boycotts by Jews (retaliating for Ford's extreme anti-semitism during the 1920s), factories in the tobacco and alcohol business (reacting on Ford's position towards smoking and drinking), and supporters of the New Deal (Nevins/Hill 1963, 63) The second problem was the difficult relationship to his son Edsel (1893-1943), officially president of the company. For not accepting him being the man he was (a rather quiet and not assertive, but very creative and cultivated person) he wanted to provoke him becoming the strong and very practical leader he himself was. For that reason he did not give him the power he would have needed (and may also have deserved) but often alienated him and ran him down. This definitely was not the best possible behaviour, because the two different characters would have been perfectly complementary and a lot of the profitable and successful ideas in the 1920s and 1930s actually were Edsel's ones (Brinkley 2003, 399-406).

Coping Strategies

In 1929 the United States in general and Ford in particular perceived a golden future. The Chrysler building was finished, transcontinental airlines started business, radio and even television revolutionized communication. Prosperous prospects were in sight. In the same year Ford himself opened the Edison Institute in Dearborn, a college connected to museums (among those the historical site Greenfield Village) and a research institute. The recently elected U.S.-president Herbert Hoover and a lot of business leaders took part in the inauguration of the project, which had cost about $30 million. At the Ford Motor Company even more surplus money was available. About 5,000 people were employed simply to keep the factories clean, because Ford thought that cleanness is a necessary condition of productivity and that waste of any kind undermines order.

Ford's perception of the Great Depression

Ford had rather clear ideas about the reasons for the Great Depression, which can be easily derived from "Moving Forward" (Ford 1930). The main problem, as he had pointed out on several occasions from the 1900s on, is confusion of the interests of capitalists, who do no longer care about their business (service) but about developments in stock markets (money). But money does not bear profit, a credo that is much older than Ford would have imagined. And for that reason Ford extremely disliked bankers and stock traders, who in his view earn money virtually for doing nothing. Further more, the redirection of the interest from production to money makes it impossible to fulfil the purpose of a business, which is high-quality low-cost service (Ford 1930, 11-2 and 159).

Ford also strictly challenges the concept of "overproduction", a standard reason given for the Depression. In his view, it is logically impossible to produce too much, but it is much more probable that wages are too low. Hence the main coping strategy was completely misleading: if production is cut (to fit demand) and prices are raised (to compensate for lower sales and for increased average costs) purchasing power decreases and sales drop even more (Ford 1930, 26-8).

The problem of unemployment is directly connected to management failures. But no to failures in crisis, but general ones: the business leader creating low-wage (and thus low-quality) employment directly creates unemployment, at least in the long run. Another connected reason is technological stagnation: in Ford's view not reorganisation, but sticking to old technologies creates unemployment.

The Depression was several times commented on by Ford. As the convinced technocrat he was, he generally thought that no downswing can halt the ongoing technological revolution. In 1929 he perceived it even as a "wholesome thing" (Brinkley 2003, 379), and in 1930 he stated: "It's a good thing the recovery [sic!] is prolonged. Otherwise the people wouldn't profit by the illness." (Brinkley 2003, 381) Only in 1931 Henry and Edsel Ford had accepted that there is a crisis. "Industry has demonstrated, that it can more than supply the demand, which naturally will leave a surplus of labour, and at present nothing appears on the immediate horizon which can absorb the surplus." (Brinkley 2003, 386) But at least in October 1932 Ford had regained full confidence: "If we could only realize it, these are the best times we ever had." (Sward 1948, 224) And when the worst was over, in December 1933, Ford resumed: "I think that the depression really taught a lot of people how to love their fellowmen … we did find a blessing in economic misfortune … There is no depression, really, now." (Sward 1948, 225)

Old ideas I: simply going through

In the early days of the Depression it was hardly perceived as a long-lasting development, but as a short-run cyclical downswing. Hence Ford joined people like Rockefeller and Morgan in announcing complete trust in the economy (Brinkley 2003, 378). This strategy was the easiest one (and definitely the cheapest, at least if successful) of provoking a self-fulfilling prophecy.

Ford was – due to his early experiences – always convinced of the importance of publicity and of public support, and hence he always invested in marketing and advertising. In 1930 for example he spent $8.7 million on advertising, leading to a – short-lived – increase of sales (Nevins/Hill 1957, 575-80). The increase was longer lasting in 1933, when Ford again launched a marketing campaign connected to the early days of the Roosevelt presidency. In a "commercial" quote of August 1933 much of Ford's business philosophy can be found: "We did not invent the 8-cylinder car. What we did was to make it possible for the average family to own one. As always we have done the pioneering work. Motor manufacturing will follow the trail we have blazed." (Nevins/Hill 1963, 24)

During the Depression Ford also kept to his strategy of vertical integration, possessing all kinds of sources of raw materials (mines, forests, even a rubber plantation), several means of transport (ships, a railway) and several factories producing intermediaries (glass, steel, motor parts, strangely enough not tires) (Nevins/Hill 1963, 9). Ford also continued to hire anyone willing to perform efficient work regardless of his social background or personal biography. Hence he did not discriminate against former criminals, disabled or African Americans, which he extensively elaborated even in his first autobiography in 1923 (Brinkley 2003, 384).[4]

The simple "going-through"-strategy lost ground at least in 1931. This year was a disaster for the Ford Motor Company. Its competitors surpassed it, and Ford lost a lot of money. This was even aggravated by communication failures of the company, nurturing hopes for a new model and hence ruining the market for model A completely (Nevins/Hill 1957, 578). But disaster was also personal: in October of the same year Henry Ford's close friend Thomas Edison died, which depressed Ford sustainably (Brinkley 2003, 389).

[4] "In part his hiring of black workers reflected the same philantropic concern that led him to include in his work force cripples, ex-cons and the blind. In Ford's view Negroes, like these other disadvantaged groups, were social outcasts who needed and would appreciate his help." (Brinkley 2003, 385)

When in November 1932 Franklin D. Roosevelt was elected president (inaugurated in March 1933), Ford – besides all political differences – at first saw him as necessary for regaining the optimism so important for recovery. In 1933 Roosevelt states: "This great nation will endure as it has endured, will revive and prosper, the only thing we have to fear is fear itself" (Nevins/Hill 1963, 1). At least in that respect, he and Ford were similar characters. Ford stated in May 1933: "A great thing has occurred among us. We have made a complete turn around and at last America's face is to the future. Three years – 1929 to 1932 – we Americans looked backward. All our old financial and political machinery was geared to pull us out of the depression by the same door through which we entered … It failed. We now realize that the way is forward – through it. Thanks to that belongs to President Roosevelt. Inauguration day he turned the Ship of State around." (Nevins/Hill 1963, 16)

Nevertheless, because Roosevelt's "National Industrial Recovery Act" of June 1933 guaranteed – among other things – the freedom of unionization, Ford – again – was very much concerned about the independence of his company. Hence, he did not join the agreement of five car producers (among those General Motors and Chrysler), demanded by the new administration from this industry. This mood of independence brought him publicity, but it also hurts his business, because for not signing the Ford Motor Company was excluded from government procurement (Nevins/Hill 1963, 16-23).

Old ideas II: Fordism

Hence to simply go through proved at least insufficient. In 1929 Ford announced a price cut of his model A. "The company believes that basically, the industry and business of the country are sound. Every indication is that general business conditions will remain prosperous. We are reducing prices now because we feel that such a step is the best contribution that could be made to assure a continuation of good business throughout the country." (Brinkley 2003, 378) The cut thus was necessary to sustain sales, to keep River Rouge in production, and because of a decreasing price difference between model A (Ford's car in the cheap-price-market) and the cars of his main competitors (the Chrysler Plymouth and the GM Chevrolet) (Nevins/Hill 1957, 576; Brinkley 2003, 381).

It was as well completely clear that Ford did not want to reduce wages. Decreasing wages leads to decreasing purchasing power and hence to deflation, which is bad for the economy as a whole and consequently and directly for any company that big than Ford as well. Hence, already in November 1929, Ford took part in the presidential "Committee on Recent Economic Changes" which agreed on abstaining from any wage cuts. But he went even further: "Wages must not come down, they must not even stay on their present level; they must go up." (Nevins/Hill 1957, 530) Immediately after the agreement thus he raised the "minimum" wage from $6 to $7 a day, because "… the purchasing power of the people has been practically used up, and still they have not been able to buy all that they must have. I, therefore, suggest the need of increasing the purchasing power of our principal customers – the American people." (Brinkley 2003, 380) The main effect of this measure – and maybe also its main reason – was publicity. Ford again was the protector of the common man, although the New York Times commented on his wage cuts on November 25, 1929, as "just another ridiculous example of that amateur economist's eccentricities" (Brinkley 2003, 380).

The consequences of the announcement were dramatic: attracted by it, hundreds of thousands of unemployed flowed into Detroit, for whom Ford nevertheless did not really feel responsible. Support for the unemployed – in his view – was the business of public administrations (Sward 1948, 225-7). In 1932 in Detroit 20 per cent of all recipients of assistance were former Ford employees and 40 per cent of all social assistance was paid for Ford and other companies outside Detroit (Baskin 1972, 332).

Furthermore Ford invested $25 million in an expansion of River Rouge early in 1930 (Brinkley 2003, 380; Nevins/Hill 1957, 574) and he also invested in other factories. Although some of these projects where cancelled as the Depression became severer, this directly led into overcapacities – perceived as impossible by Ford.

Necessary: cost cuts

Particularly raising wages was not without negative consequences as well – at least for the workers. Ford followed four strategies to compensate the higher costs, which he already had followed when introducing the $5 and the $6 day, although he always denied that: firstly, he cut the wages of employees earning more than $7; secondly he fired high-wage workers and rehired low-wage workers, often the same people for the same work; thirdly, production was speeded up, so that wage per unit of output actually decreased; and fourthly, he outsourced production, mainly of intermediaries, to companies paying lower wages (Sward 1948, 219; Nevins/Hill 1957, 531). Ford put the logic on the head: it was not the imposed speed-up in the assembly plants, but the better motivation because of higher pay that led to higher output. The same he did with outsourcing: "We are trying to spread work around. The more we can spread manufacture and employment, the more certain are we making it possible for tens of thousands of people to stay at home and work instead of flocking to Detroit to increase the general problem." (Brinkley 2003, 381) Ford officially pretended to employ suppliers only if they pay high wages as well, but in reality many of those paid wages even below average, sometimes by replacing well-paid men by low-paid women (Nevins/Hill 1957, 532). Increasingly, Ford's employees felt betrayed and confused. In several cases well-paid people were simply fired, rehired some months later at a lower wage, and after advancing to the $7-day after 60 days fired again (Brinkley 2003, 387). This was euphemised by Ford calling this period of unemployment a "lesson" to be learnt by inefficient labourers (Ford 1930, 67). Generally, during the $7-day-period employees only worked three days a week (Nevins/Hill 1957, 531).

Also pressure was increased on the traders, as Ford had done before. While Ford increased the number of sales representatives (and hence as well competition between them), already in 1929 he also cut provisions from 20 to 17.5 per cent (Nevins/Hill 1957, 579; Brinkley 2003, 380). Consequently the company financed 90 per cent of the costs for the car price reductions of 1929 by reducing the income of its traders (Nevins/Hill 1963, 61).

"Lukewarm, indifferent, and halfhearted sales representation is not wanted. It will not be tolerated, and your dealers must understand this if they expect to continue selling the Model A." (Nevins/Hill 1957, 581) This was not all. Cars not even ordered where delivered and had to be paid for cash. The purpose of this measure was twofold: it was to reduce storage costs and to acquire money. Hence Ford used his sales representatives as decentralized storage facilities and as provider of credit (Sward 1948, 208-11).

Consequently, all sales representatives who where able to do so (i.e. were not existentially dependent on Ford), left for General Motors or Chrysler, or they left business at all (10 per cent of all quit, 5 per cent were fired; Nevins/Hill 1957, 583). Hence, in 1930 the management corrected the strategy. The scapegoat Fred Rockleman, sales manager, was fired and a new scheme of provisions was introduced, increasing those for large sellers again to 20 and 21 per cent (Sward 1948, 189 and 208; Nevins/Hill 1957, 582-3). In 1931 William Cowling took over sales management, stabilizing the relationship between the company and its representatives, and provisions were raised again to 22 per cent for all traders (Nevins/Hill 1957, 584).

This was to be compensated for with patience. In an address dedicated to his suppliers Ford mentioned: "If American manufacturer do their utmost to start the wheels of industry and the material men begin to raise prices, the whole effort may be throttled. In times like these everyone has to take some risk." (Nevins/Hill 1957, 594)

Table 3: Employment at the Ford Motor Company 1927-33

	Total	Change	Payroll	Salary	Share
1927	102.029	– 28,0 %	100.532	1.497	1,5 %
1928	144.433	+ 41,6 %	141.590	2.843	2,0 %
1929	174.126	+ 20,6 %	170.502	3.624	2,1 %
1930	152.362	– 12,5 %	148.138	4.224	2,8 %
1931	108.572	– 28,7 %	104.171	4.401	4,1 %
1932	90.706	– 16,5 %	86.710	3.996	4,4 %
1933	48.957	– 46,0 %	46.282	2.675	5,5 %

Source: Nevins/Hill (1957), 685-7

In all these years, the decrease of employment at Ford was considerable, adding up to 72 per cent from 1929 to 1933. Consequently, according to estimates by the city administration already in 1931, between 14 and 36 per cent of all unemployed in Detroit came from the Ford Motor Company (Brinkley 2003, 382).

But also Ford's wage policy was impossible to sustain in 1931, when production collapsed. Hence in October 1931 regular wages were cut to $6 a day (Brinkley 2003, 388), and soon later wages for unqualified workers were even cut to $4 a day (Sward 1948, 229). In that context the ambivalent social experiment of Inkster, a small impoverished settlement close to Dearborn, took place. Ford overtook this community, inhabited almost exclusively by African Americans, and provided full social services for the population. He also employed all grown-up males at $4 a day. But only $1 a day was actually paid, the rest was kept to finance community service. This scheme even persisted Ford's withdrawal from Inkster in 1933 (Sward 1948, 229-30).

Ford also closed down factories. While before Depression he ran River Rouge, Highland Park and Lincoln (although the latter two mainly as realty) together with roughly 35 other assembly plants in the United States alone (and some more overseas). In 1933 only eight of these were still operating (Nevins/Hill 1963, 8-9)

Not new, but unconventional: terror and "back to the roots"

The Ford Motor Company was an unfriendly place in the 1930s. During Depression, fear was constant at Ford, even more than it was generally present in the U.S. economy. *Fortune* even stated in December 1933: "Mr. Ford's organization does show extreme evidence of being ruled primarily by fear of the job." (Sward 1948, 311) The main reason for that was the introduction of a "Service Department" in 1930, which was a private police force of up to 3,000 men led by Harry Bennett, a former boxer and navy member with close contacts to the syndicates and gangs (Sward 1948, 329-37; Brinkley 2003, 382-3; Nevins/Hill 1957, 591-3). Bennett, although a very disgusting character, became increasingly important a person at Ford during the 1930s. He was "Mr. Ford's personal man" (Brinkley 2003, 383), and his main duty was to prevent labour unrest (particularly unification of the employees) and rule-based behaviour of the workers (to the extent that it was forbidden to sit [sic!] during working hours). All this followed a general philosophy of Ford: "I pity the poor fellow who is so soft and flabby that he must always have 'an atmosphere of good feeling' around him before he can do his work" (Nevins/Hill 1957, 525) And personnel manager Sorensen und Bennett stated: "We make no attempt to coddle the people who work with us." (Nevins/Hill 1957, 525) This was not without consequences. The result of the increasing speed and the ongoing quarrels at Ford was continuous stress and burn-out of many employees of all stages, several health damages summarized by the term "Forditis" (Brinkley 2003, 405).

In that climate it is hardly a surprise that trade unions were almost necessary for the protection of the workers. Arbitrary dismissals, spying, tyrannic practises, an escalating obsession of the company with surveillance, no respect for competence, age, or anything else, the speed-up of production and a certain degree of direct violence were absolutely common (Nevins/Hill 1963, 29-31). Because Ford perceived himself as a patron in the relationship to his workers ("Nobody should try to draw a line between us", Nevins/Hill 1957, 535; "I have never bargained with my men, I have always bargained for them", Nevins/Hill 1963, 21), the fight against trade unions was continuous throughout the 1930s. This problem escalated in March 1932. The "Ford Hunger March", provoked by Ford's Janus-face in the relationship to his employees, assembled 3,000 unarmed protesters marching from Detroit to Dearborn (Baskin 1972; Sward 1948, 231-40; Brinkley 2003, 390-2; Nevins/Hill 1963, 32-3). Because they were not allowed to leave Detroit, a battle evolved at the city lines, later aggravating at the River Rouge factory. In the end, four people were killed and 69 injured, among those 19 seriously, by the policy and the men of the Ford Service Department. Harry Bennett was the only one among those injured, who was not a protester. Nevertheless, in the trial, widely criticised, only protesters were sentenced, because their acts were careless and illegal, while the policy had acted in good faith, but with bad discretion, and Ford employees were not held responsible at all.

In general, people were in an increasingly rebellious mood at the Ford Motor Company in 1932 and 1933 (Nevins/Hill 1957, 589). On the other side it was clear that the management should take advantage of the situation at the labour market, which aggravated the problem further (Nevins/Hill 1957, 591). Some even thought that the pacifist Henry Ford in the end waged war (at least a civil war) against his employees (Brinkley 2003, 392). Particularly some of his suppliers acted virtually exploitative. The Biggs Manufacturing Company, situated at the Highland Park estate (in possession of Ford), paid for example less than $1 a day for usually more than eight hours of work and when the employees struck in January 1933 also production at the Ford Motor Company came to a halt because it lacked supplies (Nevins/Hill 1963, 35-8; Sward 1948, 220-2).

In 1931 Ford also started a programme dedicated to his conservative philosophy of "one foot on the land, one foot in industry". He actually forced his employees to keep private gardens (Brinkley 2003, 387-8). People not owning property hence had to face long distances to their gardens at the Ford estate and even lost money by cultivating. Further more, the success in gardening was controlled by the Service Department and to fail was a reason for dismissal (Sward 1948, 228-9). Following the same philosophy, Ford also opened five small factories on the countryside and four more in the surroundings of Detroit, dedicated to combine the advantages of the industrial and the agrarian age (Sward 1948, 261-2; Ford 1930, 170-1) While these ventures never were of particular practical importance (there were only 2,000 employees), Ford as well started to engage in soybean-experiments (Nevins/Hill 1963, 9), which became rather significant later in the 1930s.[5]

New ideas I: model changes

As it is clear from the business history of the Ford Motor Company, in Ford's view design was no question at all, because demand does not stem from design but from price and quality of the product. His saying of "I don't care about the colour of a car as long as it is black …" is quite famous and a good expression of his perception of the market, which persisted – although clearly outdated – long into the 1930s.

Ford again resisted any model changes for long. But in 1931 he was forced to by a complete crash of sales of model A. Early this year, rumours about a new model emerged, the V8, which contributed to the crash (Brinkley 2003, 386). When he stopped production of model A in August 1931, Ford – again after 1927/28 – had no car to sell. And at the end of 1931 costumers simply stopped buying the old one (Brinkley 2003, 419). To surpass this problem Ford diversified production and developed multi-functional trucks (Nevins/Hill 1957, 585-6). Another reaction was "the Ford Americans never knew",

[5] In the 1940s Ford even produced a whole car almost completely from soybeans.

model Y. This model, designed by Edsel Ford and E. T. Gregory, was presented to the public for the first time in February 1932 in Europe, and from October in the same year produced in Dagenham, Ford's factory in Britain, mainly for sale in Europe (Brinkley 2003, 406-15). The design – revolutionary for a Ford – was later adopted for cars dedicated to the American market as well, and it proved rather successful (Brinkley 2003, 407).

But generally, Ford – again, because he still was not well-prepared for model changes – closed down his factories (for five months) and did not supply his sales agents with cars (for even six months), just in the middle of Depression (Sward 1948, 206). Only in February 1932 Ford announced that soon the new V8 and a better version of model A, the model B, will be introduced. The new V8 appeared at the end of March, a new model which should be "a light in the darkness" of Depression (Nevins/Hill 1957, 594-7). On the contrary, model B never became effective and was not sold officially from 1934 on. But with the V8 as well some problems remained because of technical difficulties and a rather old-fashioned design, mainly due to too much time pressure in the final phase of development. Nevertheless, in 1933 the Ford V8 became fully effective due to better design and technical improvements (Brinkley 2003, 419-20).

These changes put Ford back on profitable track, but the company faced disadvantages compared to its competitors. While these sold at least four or five models in all price classes (also because of technical improvements standardizing production), Ford only sold two – the cheap V8 and the expensive Lincoln K – and thus lost costumers, particularly in the mid-price market (Raff 1991, 742-4; Brinkley 2003, 434-5).

New ideas II: engage in banking

Ford extremely disliked the money business. Nevertheless the Ford Motor Company engaged in stock sales and in the banking business (Sward 1948, 244-53; Nevins/Hill 1963, 14-5). At least from 1930 on Ford (particularly Edsel) engaged in "making money out of money", particularly in buying stocks of banks.[6] In 1933 Henry Ford even offered – mainly for reasons of publicity – to financially rescue two important Detroit banks: the Guardian Detroit Group and the Detroit Bankers Company. In the end, General Motors bought these banks, but Ford's image improved much because of his dramatic rescue offer (Sward 1948, 253).

Not only has Henry Ford always seen his company as his bank where he could easily draw money out of, and due to his market power he also has treated his sales agents and his suppliers as creditors. But Ford in 1928 also founded the "Universal Credit Company" (UCC), an institution mainly dedicated to provide credit to his sales agents (Sward 1948, 212-4; Nevins/Hill 1963, 62). The main purpose of this company may have been earning interest, but it may also have been putting pressure on these agents. If they were supplied with not-ordered cars, they could not escape by being unable to finance these cars, and if

[6] Which was completely contrary to Henry Ford's credo: "We must get rid of the idea of making money out of money. Money is not a commodity. A million dollars in gold by itself will not produce one copper penny. Put a hen on it and it will not hatch. Water it and it will not grow." (Nevins/Hill 1963, 14)

they were creditors to the UCC, Ford could effectively prevent them from quitting business – or even from complaining about unfair practises. Even after Ford sold this company (already in 1932, maybe even due to ideological reasons) he forced the trades to collaborate exclusively with it.

Conclusions

Hence Ford developed some coping strategies which helped him surviving the Depression. He did that successfully, but compared to the main competitors, General Motors and Chrysler, Ford sustainably lost ground and never again regained former production shares (Ford, never again number one in the business, was down to less than 30 per cent throughout the 1930s, and the share decreased further, making Ford third in revenues). Because Ford always pretended not to care about his competitors (his opinion was that there is no use in imitating, and that a company reacting on the actions of others looses sight of its actual purpose), this may not have bothered him at all, but the conclusion has to be drawn that Ford's strategies were worse compared to the strategies of others.

To sum up the main points of coping, definitely costs cuts and the model changes were most important in securing the survival of the company. While concerning the former, it was necessary to keep an image externally while acting differently internally. And concerning the latter, Ford had to accept market developments that in reality influenced even the Ford Motor Company. But a negative resume remained: while Ford learned not to put too much pressure on his suppliers and particularly on his sales agents, he created a climate of fear and violence in the company that persisted until 1945 and led to incidents, which only could be described as "battles" against trade unionists.

In the end, the Great Depression was not a catastrophe for Ford, because he had economically efficient – although socially quite brutal – coping strategies in "socialising" his losses. The assets of the Ford Motor Company were only down from $925 million in 1929 to $864 million in 1933, and Ford still possessed $113 million in cash and $75 in government bonds (Nevins/Hill 1963, 8). Nevertheless, Fordism proved as "not bullet-proof" (Brinkley 2003, 394), and only in March 1934 Ford was able to announce the reintroduction of the $5-day (Nevins/Hill 1963, 65). This took place after Ford has regained some prestige by winning car races (as he had done importantly in the 1900s and 1910s), and sales had stabilized again (Nevins/Hill 1963, 64). But the road to success – not the tremendous success of the 1910s or 1920s again, but at least considerable profits could be earned again – was retaken by introducing three new models (Mercury, Lincoln-Zephyr, Continental) in the 1930s to challenge the competitors by finally covering all price classes and taking car design and extra equipment as important as it was for the costumers.

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