Competitive Relationship among German Automobile

Companies in the 1920s

- Adam Opel vs. Daimler-Benz -

by Yuji NISHIMUTA*

In June 1926, Daimler and Benz merged, forming Daimler-Benz A.G. Stuttgart-Unterturkheim. Its formation was one focus of the corporate merger activities deployed across the board by the German automobile industry to counter the strong import offensive into the German automobile market since the early 1920s by the American automobile companies, which had overwhelming production ability. At the time of merger, a severe struggle for leadership unfolded caused by various interests, particularly banks. Both companies, Daimler and Benz, in 1924 first formed a cooperative profit group, Interessengemeinschaft; the discussions at the 9 joint board of directors meetings that followed lead to a strengthening of the inclination towards merger as we have already seen.

Well then, in what direction would Daimler-Benz set forth in the 1920s German automobile market? With what kind of strategy would Daimler-Benz try to overcome these circumstances?

In automobile history, the 1920s is well known as the S-Wagen period for Daimler-Benz ¹⁾. In other words, centering around Dr. Ferdinand Porsche (1875-1951), director of technology, development progressed of what is called the super charger, Kompressor, and many famous models were produced, such as models S, SS, SSK and SSKL ²⁾. However, we can not concentrate our look at the overall image of the 1920s Daimler-Benz management here. Rather, as appropriately expressed in the company's latest corporate history, Daimler-Benz 100 Years (2nd volume, business edition), published in January 1986, M. Kruk & G. Lingnau, 100 Jahre Daimler-Benz Das Unternehmen, Mainz 1986,as' fast Ein Felhstart' ³⁾ (almost all failures at the start), Daimler-Benz suffered the most severe managerial troubles during this period (1926-1932).

What was the core of the problems faced by the newly created Daimler-Benz in this period? How did Daimler-Benz confront this? Did it succeed or fail? What did Daimler-Benz learn from all this? The task of this paper is to answer this series of questions through the competitive relationships among German automobile companies

^{*} Professor, Graduate School of Economics, Kyoto University.

¹⁾ Soichi Takahashi, German Automobiles - Exploring their History and Classics, 1971.

²⁾ W. Oswald, Mercedes-Benz Personenwagen 1886-1986, Stuttgart 1986, S. 204-223.

³⁾ M. Kruk & G. Lingnau, 100 Jahre Daimler-Benz Das Unternehmen, Mainz 1986, S. 119-132.

in the 1920s.

I Daimler-Benz in the Early Days of Formation-1920s

Factors for Setting Two Strategies

"Following old tradition, we value the highest quality labor, die hochste Qualitatsarbeit, at our factory, even today. Therefore, we absolutely will not introduce a system with extreme division of labor in imitation of American example. The reason is that at its core such a system causes serious damage to processing reliability and precision. The production method employed at Daimler today is a happy merger of equipment management that saves time, labor and money, and hand processing that maintains the highest quality, handwerksmasiger Bearbeitung". (Daimler company newspaper, May 20, 1925).

"We must implement change according to the American model of management and production." ⁵⁾ huge investment is required for application of an American-style production method. This assumes high domestic and foreign sales. Already trials are being conducted on a broad scale at the Unterturkheim and Sindelfingen plants. We are bringing out notable expansion of production at these plants and the Marienfelde plant." ⁶⁾ (Daimler sales report, June 25, 1925).

We can say that these two quotes show contrasting attitudes with regard to the American-style production method known as the Ford system, which showed all-around popularity in this period. Around the period of the stabilization of mark (1924), the German automobile industry sought a quick response to counter the American automobile companies such as Ford and GM which had quickly established a mass production system and was advancing globally. The response naturally differed according to each company situation. What is surprising is that these expressions of two contrasting attitudes towards the American production system mentioned came from the same German automobile company and at just about the same time.

The former statement came from an article published in a company newspaper in 1925 by the pre-merger Daimler-Motoren-Gesellschaft, Stuttgart-Unterturkheim for a factory tour group. On the other hand, the latter was advocated by Daimler in the 1924 agreement with the former Benz for the merger-oriented cooperative profit group, Interessengemeinschaftsvertrag, and again in 1925 in the board of directors report in the Daimler annual report, Geschaftsbericht der Daimler-Motoren-Gesellschaft, Bericht des Vorstandes.

As directly revealed here, in the early period of its formation (organization of 1924 cooperative profit group, 1926 merger) Daimler-Benz in fact had two coexisting

⁴⁾ Daimler-Motoren-Gesellschaft, ein Rundgang durch die Daimler-Werke in Untertürkheim, 20.5.1925, S. 3, Daimler-Benz A.G. Historisches Archiv, Stuttgart-Untertürkheim (DBAG-Archiv), Best. DMG 11., im Hamburger Stiftung für Sozialgeschichte des 20. Jahrhunderts (Hrsg.), Das Daimler-Benz-Buch Ein Rustungskonzern im>Tausendjährigen Reich<, Nördlingen 1987, S. 69.</p>

⁵⁾ Niederschrift über die Besprechung der Vorstande der I.G. Firmen Daimler und Benz vom 5. Mai 1924, (DBAG-Archiv, PD 20) S. 2.

⁶⁾ Daimler-Motoren-Gesellschaft, Berlin-Stuttgart, Bericht über das 35. Geschäftsjahr (1.1.1924 bis 31. 12. 1924).

strategies. First, let us take at look at the former.

Here we see an expression of the tradition continuing since before World War I of individual production of large luxury cars. If we take a general look at the automobile production of the pre-merger Daimler and Benz up to this period according to annual units produced and annual number of models produced and units produced by model, we can see that both companies overall annual production was about 2,000 units. Among these, for example, 6-10 models of passenger cars were produced annually, with production of each model ranging from several tens to several hundreds of units. However, we cannot overlook the fact that another important element was added to this basic production system during the course of World War I (1914-1918). That is, during the war, Daimler gained particular experience in development and production of airplane engines 7).

While just making its appearance, the airplane began to play an important role in the latter half of WW I. The automobile industries of the warring countries were mobilized on a large scale for airplane engine development and production ⁸⁾. In Germany, the pre-merger Daimler became the central figure in this regard. The company in 1916 built a specialized engine plant in Sindelfingen, a suburb of Stuttgart and began full-scale expansion of production. During the course of the war, Daimler produced 19,600 airplane engines (from 6 cylinder with 160 PS output, to V12 cylinder with 675 PS), making up 43% of total German airplane engine production in this period ⁹⁾.

After the war ended, the problem arose of how to handle these surplus production facilities; however, at the same time a huge problem developed of whether the company should employ the many newly assembled designers and engineers after the war in civilian-demand production¹⁰⁾. At this point, the company took on the challenge of transferring internal combustion engine technology to the civilian field of large, luxury passenger cars. This technology saw remarkable progress in the course of airplane engine development during the war; in particular, advances were seen in research and development of a new air compression method, Verdichtungsverfahren hilb. As a result, Daimler possessed exceptionally high performance, incomparable with its existing performance and produced the odel K¹²⁾ and odel S¹³⁾. These cars were designed for combined use as a luxury passenger car and race car, loaded with a supercharger -equipped engine, Kompressor. The ultra luxury car category as it should be called was formed through these developments¹⁴⁾. At the same time, this was the

⁷⁾ Hamburger Stiftung (Hrsg), Das Daimler-Benz Buch, 1987, S. 45 ff.

⁸⁾ Bugatti (France), Hispano Suiza (Spain), Packard (USA), Austro Daimler (Austria), Rolls Royce (England), Daimler (Germany), etc.

⁹⁾ M. Kruk & G. Lingnau, 100 Jahre Daimler-Benz Das Unternehmen, Mainz 1986, S. 93.

¹⁰⁾ Hamburger Stiftung (Hrsg.), a.a.O., S. 46. During the WWI period, the company also had an important position in truck production and trial manufacture of tanks.

¹¹⁾ Ebenda, S. 51

¹²⁾ W. Oswald, Mercedes-Benz Personenwagen 1886-1986, Stuttgart 1986. S. 160. 6, 240cc, 24/100/140 PS.

W. Oswald, a.a.O., S. 204-223, 6, 800cc, 26/120/180 PS. Also, Le Volant special edition, 100 Years of German Automobiles, 1986, p.48.

true formation of the ultra luxury car division, which was united with the motor sports division, which played a large promotional role for Daimler and post-merger Daimler-Benz. Another important point is that the company retained in this division the advanced technology developed during World War I along with those engineers, and, accordingly, retained the company military research and development structure at the same time ¹⁵⁾. At this time, in 1922, Ferdinand Porsche, the head engineer from Austro-Daimler, Daimler's Austrian subsidiary, transferred to the headquarters and was welcomed as head designer and director. Now, centering around Porsche, Daimler-Benz produced some excellent cars in the 1920s, such as the Model S (1924), SS (1928), SSK (1928) and SSKL (1929) ¹⁶⁾.

However, not more than 374 units were produced and sold from these series. Despite the large investment in research and development, it is said that this division had almost no significance for profit.¹⁷⁾

On the other hand, the strategy that Daimler-Benz launched at the start of business went in the direction of the latter quote mentioned earlier.

First, an integrated design office, Einheitliches Konstruktionsburo, will be formed for all products (passenger cars, Personenkraftwagen, and trucks, Lastkraftwagen.

Second, the car models produced will be consolidated and distributed in order for every plant to only produce one car model, moglichest nur ein TYP'. The following idea was presented as a detailed plan for this.

Mannheim plant 18 --- 2-liter passenger cars

Stuttgart - Unterturkheim plant 19) --- 4- and 6-liter passenger cars

Berlin - Marienfelde plant²⁰⁾ --- 4-5 ton trucks

Gaggnau plant²¹⁾ --- 2-3 ton trucks

Ulm plant²²⁾ --- 1-11/2 ton trucks

Sindelfingen plant²³⁾ --- centralized body production and supply for all models In addition, a special committee concerned with production technology, Eine besondre technische Kommission, will be created to facilitate continuous modernization such as installation of new equipment, Modernisierung des Maschinenparks. In particular,

¹⁴⁾ It is very interesting that in automobile history many of the classic cars that we call 1920s "Vintage cars," were produced in the same way. In addition to the Mercedes-Benz Model S, the development of the Rolls Royce Silver Ghost, Hispano Suiza, Duesenberg, Packard, etc. were all related to World War I airplane engine production. The development and production of airplane engines in this period carried out a decisive role in the advancement of internal combustion engine technology. This came to guide the growth of automobile technology.

¹⁵⁾ Hamburger Stiftung (Hrsg.), a.a.O., S. 51

¹⁶⁾ W. Oswald, a.a.O., S. 204-223.

¹⁷⁾ Kruk & Lingnau, a.a.O., S. 122.

¹⁸⁾ Benz passenger car plant.

¹⁹ Daimler passenger car plant.

²⁰⁾ Daimler truck plant, Berlin suburb.

²¹⁾ Benz truck plant.

²²⁾ Magirus truck plant; merger was planned.

²³⁾ New Daimler plant built to produce airplane engines during WWI.

every plant production capability should be increased one chassis per worker for the time being through the methods of change according to the American model of management and production, 'Umstellung der Betriebe und Arbeitsweise nach amerikanischen Muster'. (Daimler director Berge proposal at the time of merger.) ^{2 4)}

Comparing this to both Daimler and Benz production methods, etc. up to this point, the proposal planned for very drastic reorganization. In fact, this was nothing less than a major change in the production system (moving to a production system basically organized around each car model, with each plant producing only one model(25)²⁵. In addition, the formation of a central design office meant the separation and independence of the production organization from the research and development organization. Moreover, the conversion of Sindelfingen to a plant specialized in body production also attracted attention. More than anything, the intent to move toward mass production glorifying the application of American production methods was extremely unexpected, not only in comparison with both companies usual production systems, but also from our generally accepted idea of Daimler-Benz.

When we see automobile production (by model) in 1927, the first year of the new Daimler-Benz, we can clearly see the embodiment of the new policy we looked at above. At the Unterturkheim plant with TYP 200 car model production only, the annual output was 4,788 units, vividly confirming the change from the pre-merger production system. When we take the new Daimler-Benz first newspaper ads. From one sentence in the ad "Our production is increasing from week to week", "Unsere Produktion steigt von Woche zu Woche", we can say that the new starting direction for the new Daimler-Benz is clearly spelled out here. When we pay attention to the ad copy for the above-mentioned TYP 200 (8/38 PS), we can see the copy "the most economical, the safest, the smallest practical car", "Der Kleinste Gebrauchswagen von Hochster Wirtschaftlichkeit und Betriebssicherheit". If we look in these ads for Daimler-Benz management direction in the start-up period, it is undeniably Mass production of practical cars, * as clearly set forth here. Regarding the production method itself, unfortunately, obtainable materials are limited at present. However, if we look at the make up of the single product assembly lines for TYP 200 and TYP 300 at the Unterturkheim and Mannheim plants, we can get a general idea. Thus, we can clearly

²⁴⁾ Niderschrift über die Besprechung der Vorstande der I.G. Firmen Daimler und Benz vom 5 Mai 1924, DBAG Archiv, PD20, S. 2.

²⁵⁾ If we are speaking of the production process itself inside the plant, this means the formation of a processing/assembly line for each car model. In this case, it is natural for there to be a difference in stages: does the line advance by conveyor belt or other automatic mechanical means or is it advanced manually? This assumes there is a basic difference in the existence of such production lines by categories (models in the case of automobiles).

²⁶⁾ True this is an assembly line; however, I would like to draw your attention to the phase before automatic movement conveyor belt equipment; in other words, one intermediate phase leading to the completed "Ford System". According to the German automobile manufacturers (and more broadly, European automobile manufacturers), when introducing the completed form of the Ford System, the American System, one unique research subject was to find out how the system was realized and what kind of intermediate steps were taken. However, as discussed before, whether or not a "ar-model differentiated line" was conceivable or not was a fundamental turning point.

see here the formation of an assembly (conveyor) production line that assumes product standardization. It goes without saying that this was a surprising because Daimler-Benz was thought of one-dimensionally, as a luxury car maker using individual hand production that was completely unrelated to this sort of thing in the past. However, this is thought to be very important when looking at Daimler-Benz management trends thereafter. Meanwhile, individual hand production of cars such as the Model S (annual production 22 units), which we looked at earlier, coexisted within the company car-model production program .

In this way, Daimler-Benz started as a new company actually combining two contrasting strategies.

Well, what was the market reaction to Daimler-Benz starting off thus with a mass production / mass sales system? Looking at Daimler-Benz's automobile production in the following period, we can see that at the beginning, the planned production system did not progress satisfactorily at all. Rather, production of each model was leveling off or decreasing while the number of models, which was initially reduced to the minimum was increasing. Why was this? A board of directors meeting, Vorstandssitzung, was promptly held on December 22, 1927 to examine how things really stood with the new policy. How did the Daimler-Benz board of directors view the situation?

Let us try to guess by taking a look at the minutes, Protokoll, from that meeting ²⁸. In the discussion, the various factors causing poor sales were examined from all angles. Setting aside the necessity of improving the new 2-liter model ²⁹, which was not complete, the problem was nothing less than the pricing policy ³⁰.

Daimler-Benz in the 1920s German Automobile Market

Let us look for the problems Daimler-Benz faced in this period by examining the overall state of the German automobile market in the 1920s, particularly in the period after stabilization of the mark (1924). When we see lists of the car models (passenger car) of representative auto makers appearing in the German automobile market in this period, we can see that the most severe competition developed in the section labeled intermediate cars. At this time, even though there was customs duty on automobiles, price competition from American cars was still extraordinary.

The German sales price, including duty, of American 2,000cc class cars such as the Chevrolet, Ford T and Ford AF³⁺¹ was on the level of 4,400RM - 4,800RM, while the price level of cars by representative German makers was about 6,500RM - 7,800Rm for cars considered to be in the same class of capacity, exhaust, etc., such as the

²⁷⁾ Finding out how this kind of general corporate image that we have of Daimler-Benz was formed and firmly planted in our minds, and what relation this has to reality is an important issue for us.

²⁸⁾ Protokoll der Vorstandssitzung vom 22. Dezember 1927 in Untertürkheim (Daimler-Benz A. G. Historisches Archiv, PD 25).

²⁹⁾ Ebenda, S. 1-2.

³⁰⁾ Ebenda, S. 12-13.

³¹⁾ European version of Ford Model A. W. Oswald, Deutsche Autos 1920-1945, S. 1411-1417.

Mercedes-Benz TYP 200, Adler, Stoever, and Wanderer. If these cars hadn't shown excellent performance and quality compared to the incoming American cars, they certainly would not have been able to avoid being overcome by market competition from the latter.

As a matter of fact, this was the second very strong influx period ^{3 2)} of this class of foreign car. The total number of foreign cars, including both imports into the German automobile market and local assembly, began soon thereafter. In 1928, a total of 53,000 foreign cars entered Germany. If we show this in comparison with overall German automobile production and domestic car sales, we see that in 1928-29 the share of foreign cars in the German passenger car market reached almost 40%.

It can be said that Daimler-Benz strategic mass production car, the Mercedes-Benz TYP 200 (4/20PS), was in the center of this competition facing particularly severe competitive conditions.

The impact the influx of American cars had on the German automobile market was not limited to price as discussed above. Even more importantly, the cars (Ford Model T, Chevrolet, etc.) that formed the core of the mass production system in the American domestic market affected the intermediate car class in Europe, including Germany, as we can see from this fact, and in the 1920s German automobile market an even smaller car model, the so-called compact car group appeared .

At this time, Adam Opel, Russelsheim, held the most important position. The company in 1923 carried out production reforms ahead of other companies and set about mass production of a one-liter exhaust volume class compact car, 4/12PS (later 4/14PS), via a conveyor belt system. Then, by reducing prices along with successively increasing sales and production volume, Adam Opel was the first to succeed in Germany³³⁾. The company's automobile production in 1928 climbed to 42,000 units, greatly distancing itself from other companies. In that same year Adam Opel share of the German automobile market reached about 36%. The combination of this compact car and mass production system (American system) bridged the gap with the influx of American cars and German automobile companies maintained their positions in the German market. Above all, we can say that pushing ahead with the formation of a mass automobile market was the most important strategy. In addition to Adam Opel, Hanomag 2/10 PS^{3 4)} recorded cumulative single car model production volume of 15,775 units from 1925-1928 and Dixi 3/15PS 35) recorded 24,775 units from 1927-1931, indicating the formation of the mass automobile market in Germany began through this compact car class. Making an aside here, taking into consideration the fact that Adam Opel first compact car, 4/12 PS, was said to be, in reality, almost an exact copy of Citroen (France) compact 5CV 36 and Dixi compact Dixi 3/15PS was produced on license from

³²⁾ The first influx period was from 1923-1925.

³³⁾ However, Adam Opel first compact car (4/12 PS, later 4/14 PS) is said to be almost an exact copy of France Citroen., W. Oswald, a.a.O., S. 292.

³⁴⁾ W. Oswald, Deutsche Autos 1920-1945, Stuttgart 1985, S. 126-128.

³⁵⁾ Ebenda, S. 52-55, S. 82-84.

³⁶⁾ Ebenda, S. 292. There was actually a lawsuit with regard to this, with the result being that Adam Opel upped its car from 4/12PS to 4/14PS.

England Austin for its compact Austin 7, it can be said that this compact car strategy was European automobile companies trump played in response to American automobile companies advance into Europe.

At any rate, with the mass influx of American cars as impetus, the German automobile market was undergoing major changes and companies were in the middle of the turmoil; naturally Daimler-Benz also took a direct hit.

The fight between American and German automobile companies taking place in the German automobile market was the most intensified in this period due to the former having both imported cars and locally assembled cars. It can be said that the Mercedes-Benz TYP 200, nearly the same class as these American cars, was forced to establish itself in severe competitive circumstances.

At the board of directors meeting, it was decided to lower the price from the present 7,800RM to 7,100RM; however, this was their limit and the necessity of introducing various measures to reduce production costs was strongly emphasized ³⁷.

Daimler-Benz 's 'mass production/mass sales system' first confronted nothing less than a crisis in these market conditions.

II The Compact Car Problem and the Intensification of Opposition Within Management

The initial crisis that Daimler-Benz ran into with its new policy became an even bigger problem about a half year later. These were the heated arguments surrounding the compact car problem that erupted at the board of directors meeting on August 16, 1928.

The discussion at this meeting represents the current situation very well and contains important elements for looking at the future transition. Although lengthy, let us take a look at the minutes^{3 8)} and examine the discussion.

As for the attendees and agenda ,it is important to note here that in addition to the directors, C. Jahr from the auditors committee, Aufsichtsrat, also attended. Among the items on the agenda, the discussion almost completely revolved around the first item, production planning, Fabrikationsprogramme (Unterturkheim and Mannheim plants). (This topic accounts for 8 of the 12 pages of minutes.)

The discussion begins with a question from Schippert to Jahr, the delegate from the auditors committee.

Schippert: "Will the auditors committee approve the necessary budget for production of the compact 1.5 liter car (der Kleinen 11/2 Liter-Wagen)?" 39)

Jahr: "Before answering this question, there are several issues that must be clarified. The first is, whether this compact car has already proved its worth in the trials conducted so far. The second is whether production of the compact car will

³⁷⁾ Protokoll der Vorstandssitzung vom 22. Dezember 1927 in Untertürkheim, S. 15-16.

³⁸⁾ Protokoll der Gesamtvorstandssitzung vom 16.8.1928 in Untertürkheim (Daimler-Benz A. G. Historisches Archiv, PD 25).

³⁹⁾ Protokoll der Gesamtvorstandssitzung vom 16.18.1928 in Untertürkheim, S. 1.

get us to the point where we increase our profit?" 40)

In regards to this, Porsche then reported on the compact car trials up to this point.

"According to Werner, the present head test driver, several compact cars were seriously test driven at Nurburgring 41). The test drive results were satisfactory for the cooling system, spring valve damage and bearing defects. In the long-term tests already conducted on the compact car, no damage or defects have yet to appear. The problems occurring up to now have all been easily and soundly eliminated." 42)

After Porsche explained the course of development, Lang and Kissel reported the preliminary cost calculation, Vorkalklation, assuming monthly production of 1,000 units 433.

Jahr responded to this with a question: "What would the results be assuming monthly production of 700 units instead of 1,000?" 44)

Kissel: "We can still expect satisfactory results in that case" 45).

Jahr spoke: "Speaking from our experiences with previous car models, I don't feel inclined ask the bank financing group for the 10 million marks required for production of this compact car. I am doubtful as to whether people will pay 5,000 marks for a 1.5 liter car; Opel has continued to reduce that price. Moreover, I also doubt whether this kind of compact car will continue to sell in the future as well as at present. Then, if we have to pay a million marks annually in interest on the credit, profit will become that much less and there will be almost nothing left."

Kissel replied: "One smaller car is absolutely essential to improve use of the sales structure. Our car models now are finally beginning at the 7,000 mark level and dealers are saying that without a less expensive sales target, they can continue ⁴⁷. It is thought that compact cars will greatly flourish, particularly in Germany, when automobile traffic increases further because the weight of large cars is too high for carrying a few people. There is not much too fear of competition from

I'd like to add an explanation here. Development of compact cars under 1.5 liters by F. Porsche at Daimler-Benz did not actually begin in this period. At the time of the merger between Daimler and Benz in 1926, head designer Porsche had already prepared three new car models. These were the 5/25 PS (1.392 liter), 8/38 PS (2 liter) and 12 /55 PS (3 liter), corresponding to factory production numbers WO1, WO2 and WO3 respectively (Table 9 below). As we know, the latter two were actually placed on the mass production track at this time. Meanwhile, eight units of the WO1 5/25 PS prototype, Prototype, were accounted for in the 1926 production statistics.

⁴⁰⁾ Ebenda.

⁴¹⁾ A German race track and test course.

⁴²⁾ Protokoll 16.8.1928, S. 1-2.

Again, 28 prototype units were accounted for in 1928 production statistics (similarly, Table 3-8). Thus, we can see that a lot of time was spent on compact car development by Porsche at Daimler-Benz.

⁴³⁾ Protokoll der Gesamtvorstandssitzung vom 16.8.1928 in Untertürkheim, S. 2.

⁴⁴⁾ Ebenda.

⁴⁵⁾ Ebenda.

⁴⁶⁾ Ebenda, S. 2-3.

⁴⁷⁾ Ebenda, S.3.

Opel because they produce cars that are completely different than ours. However, at this point other makers aren't producing any cars that we would consider as competition to our 1.5 liter car. In this class, the competition is actually less than in the more intermediate-size car model group. Moreover, we would also hold a better position in any new merger negotiations that might crop up if our car model program was as complete as possible "48".

Schippert spoke next.

"Without question, the Unterturkheim plant requires new activity. With only the present car model, the Unterturkheim equipment is not being used fully. If sales are poor, we will have to reduce monthly production of the 2-liter car to 350 units with the Unterturkheim plant presently requiring just about everything, a new car model is absolutely essential to supplement production, and I believe the 1.5-liter car is suitable for that purpose" 49).

Nallinger argued against this.

"I agree that it essential to expand our customer base by producing a less expensive car. However, I don't think this should be done by adopting a new compact car; I think it should be done by reducing the cost of 2-liter car production and cutting back purchase of raw materials.

From my viewpoint, the 2-liter car is already sufficiently small. If its price is reduced further, it certain to be bought by a wider range of people. In my opinion, there will be higher demand from Mercedes-Benz customers, who are used to luxury, and soon the 1.5-liter car will be enlarged to 2 liters anyway" 50 .

The discussion following was a vehement response.

This discussion was clearly not limited simply to the problem of whether to introduce a compact (1.5 liter) car, but encompassed Daimler-Benz overall management policy.

On one hand, are the following distinguishing points from Kissel remarks.

First, it is important that not only F. Porsche, but Wilhelm Kissel, who would rise to the position of president, Vostand vorsitzende, of Daimler-Benz around 1930, clearly saw compact cars in the future of the German automobile market.

Second, furthermore, his attitude was to enthusiastically undertake development to the extent of surpassing Adam Opel at that time. It can be said that Daimler-Benz is showing here the rather extreme position of getting involved in the mass compact car market.

Third, he pointed out the severity of the competition in the more intermediate size car group. From the objective situation we saw in the previous chapter, it is clear that this means the competition with the mass influx of American cars.

⁴⁸⁾ Ebenda.

⁴⁹⁾ Protokoll 16.8.1928, S. 3-4. This discusses management pressures due to investment in rationalization and low operation rates. Please also refer to Chapter One of this paper for German capitalism and the position of the automobile industry during both war periods.

⁵⁰⁾ Protokoll 16.8.1928, S.4.

Fourth, he was inclined to pursue new merger negotiations. We can see here the General Motors style * manner of behavior Daimler-Benz had since the beginning of its formation, with the support of Deutsche Bank ^{5 1)}.

Fifth and finally, he aspired to have as complete a car model program as possible. Similarly to point 4, this clearly shows Daimler-Benz M style behavior pattern.

On the other hand, Nallinger represented the conservative element in Daimler-Benz.

We can get this from his comments like the 2-liter car is sufficiently small and Mercedes-Benz customers, who are used to luxury 5 2).

On the whole, what kind of stance would Daimler-Benz take with regard to the expanding of the automobile market appearing in Germany now, with the mass influx of American cars? At the time Daimler-Benz was confronting problems concerned with deciding on this kind of strategy, disagreement and opposition existed within the board of directors.

The result was that Porsche, Kissel, Schippert and Niebel supported introduction of a compact car, while Nallinger, Lang, Loehman and Jahr opposed it. With four against four, the discussions were greatly divided and a conclusion was postponed.

Two months later at the board of directors meeting on October 24, 1928, first, the denial of introducing a compact car was confirmed and second, it was decided to add a 2.6-liter superior class to the 2-liter TYP 200 Stuttgart. The prices were 6,700 marks for the standard 2-liter, 7,700 marks for the 2.6-liter and 8,700 marks for the deluxe 2.6-liter car^{5 3)}.

Directly after the meeting, F. Porsche in November 1928 resigned as technology director at Daimler-Benz. After temporarily moving to Austrian automobile maker, Steyer, Porsche in 1930 set up an independent design firm, Porsche Konstruktionen GmbH, and set out on his own as is well known.

III Daimler-Benz's 'Management Chaos'

Thus, the start of the new Daimler-Benz in the 1920s was not an easy one. Here we can point out Daimler-Benz's situation, which can be said to be a management chaos.

We can see a picture of Daimler-Benz increasing various car models as the years pass, quite in contrast to its early management direction.

When the company started, there was the 2-liter car, called the TYP 200 Stuttgart. To this, the beefed-up 2.6-liter 260 was added in 1929, which was also available in two variations: long, Lang, and short, Kurz. Similarly, a 3.5-liter version

⁵¹⁾ M. Kruk & G. Lingnau, 100 Jahre Daimler-Benz Das Unternehmen, S. 323.

⁵²⁾ Can you hear the 'Daimler-Benz-like tone' in Naringer words? The development between these two contrasting or conflicting elements in both Kissel and Nallinger shaped Daimler-Benz future.

⁵³⁾ Protokoll der Vorstandssitzung vom 24. Oktober 1928 in Mannheim, S. 1-2. (Daimler-Benz A.G. Historisches Archiv, PD 25).

was added to the 3-liter TYP 300 Mannheim, and this was later stepped up to 3.7 liters

In parallel with this, the TYP Nurburg 460 debuted in 1928 from the Mannheim plan. This was designed and sold to compete with Horch's popular 8-cylinder car, the Horch 8^{55} . Later, a 5-liter version of the Nurburg 460 was also added 6^{56} .

This again differed from what was initially expected and Mercedes-Benz shifted in the direction of increasingly large and more luxurious cars. In the midst of this trend, Daimler-Benz at last in 1930 put out TYP 770, the so-called Grosser Mercedes ⁵⁷⁾. Weighing 3,500kg with exhaust volume of 7,655cc, the Grosser was equipped with a supercharger, providing maximum output of 200 PS and maximum speed of 160kph. The price of this car was 47,500RM ⁵⁸⁾. Needless to say this car became a "kaiser wagen," used as an official car by heads of state around the world ⁵⁹⁾.

This car too was originally Daimler-Benz's response to the Maybach 12 (7 liter), which was loaded with the Maybach company's V-12 cylinder engine. An ultra luxury car maker, Maybach Motoren Gesellschaft, was well known for production of airship engines. It is not well known that the Grosser was made to secure Daimler-Benz's dominance in German cars for itself, an 'Absolut Wagen' so to speak 600.

In this way Daimler-Benz began to gradually increase the number of high-end cars in its car model program to compete with other companies.

On the other hand, the company added a smaller car to its lineup with the 1931 debut of the TYP 170 1.7 liter car⁶¹⁾.

However, this across-the-board increase in car models did not eliminate management troubles. In the change in Daimler-Benz's balance sheet and profit and loss statement in the period from 1927-1932. We see the contrast between the apparently small profit, Reingewinn, in 1927-29 and the incommensurable losses, Verlust, in 1930 and after. In this period, Daimler-Benz carried forward all the meager profit on its books in the following fiscal year and continued not paying a dividend.

In this period several new merger plans were promoted 620, the most important of

⁵⁴⁾ W. Oswald, a.a.O., S. 194-197, 238-243.

⁵⁵⁾ W. Oswald, a.a.O., S. 200-203, 244-251.

⁵⁶⁾ Ebenda, S. 200.

⁵⁷⁾ Ebenda, S. 144.

⁵⁸⁾ Ebenda, S. 252-267.

⁵⁹⁾ I'll introduce here a section of the Grosser Mercedes customer list.

^{1930:} Sweden's King Gustav V., Thailand's King Prodiadepok, Hungary's Admiral Horthy, Berlin University Professor Sauerbruch, German President Paul von Hindenburg, Albania's King Achmed Zogu, Bulgaria's Czar Boris III, Heinkel's Director, Werner of Siemens.

^{1934:} Adolf Hitler, Hermann Goring, Josef Stalin, Benito Mussolini.

^{1937:} Japan's Emperor Hirohito, Spain's head of state Franco, Portugal's Prime Minister Salazar, Donnersmark's Lazy Henchel, Reich Postmaster Dr. Ohnesorge, German Ambassador in Rome (from Daimler-Benz A. G. Historisches Archiv. Betr.: Prominente Kuden, die den TYP "Grosser Mercedes" gefahren sind, gez. Braun, 31.7.63).

⁶⁰⁾ W. Oswald, a.a.O., S. 252.

⁶¹⁾ W. Oswald, a.a.O., S. 252.

⁶²⁾ W. Hagemann, Das Verhaltnis der deutschen Grossbanken zur Industrie, Berlin 1931, Die Deutsche Bank 1870-1995,

which were the Adam Opel merger negotiations through Danat Bank, promoted by Deutsche Bank, particularly in the 1928-29 period ⁶³. The outcome of these negotiations was an extremely important issue because there was another merger negotiation concerning Adam Opel at the same time on the other side. In March 1929, U.S. largest automobile company, General Motors, suddenly announced the completed purchase of Adam Opel (acquisition of 80% of the company's stock). This result was serious because in this period Adam Opel showed rapid growth in the German automobile market and held the number one position in compact cars. This clearly marked a new phase in the competition between American and German car makers in the German automobile market. In other words, this showed the competition of German and American capital concerned with the German automobile industry itself.

In the deepening of the global panic after October 1929, there continued a particularly desperate scrambling toward management reform. If we take a peek at the board of directors meeting ⁶⁴⁾ in the midst of this, in December 1932, we see that a major problem appeared for the second time. Surprisingly, this was the reappearance of the compact car problem.

Porsche was of course not present among the attendees ^{6 5)}. The agenda was he condition of our company from the point of view of our market position. ^{6 6)}

The minutes show that Kissel had absolute control of the discussion. Namely, Kissel spoke: "Our TYP 170 and new 2-ton truck are in good shape. However, the competition is becoming very severe, with frequent occurrences of improper means, and the market is showing aspects of excessive competition.

However, only improving policies and economic condition (Nur eine Besserung derpolitischen und wirtschaflichen Lage) can alleviate this situation. (in this kind of situation) it is confirmed that a continuing trend exists in all markets toward lower prices and the lowest priced automobiles.

Accordingly, on account of this we have to assume the following. That is, if not policies and economic situation, and the trend toward cheaper prices and the cheapest priced cars continues, sales of our car model program will surely suffer further.

We can supplement out program with a cheaper car model, that is one in the 3,000RM price range before September or October 1933. Our 1.3-liter rear engine car (1.3Liter-Typ mit Heckmotor) has hurdles that we must overcome. However, we as Mercedes-Benz are being forced to send into the market an outstanding car model even at the 3,000RM price level.

Using all means and as quickly as possible, our company must try to produce a cheaper passenger car model worthy of our name."

What we see here is nothing less than a picture of a management chaos of

⁶³⁾ Ebenda, S. 142, Die Deutsche Bank 1870-1995, Munchen 1995, s.

⁶⁴⁾ Protokoll uber die Vorstandssitzung in unterturkheim am. 3. Dezember 1932 (Daimler-Benz A.G. Historisches Archiv, PD 25).

⁶⁵⁾ Not only Porsche was gone, but more than half the members who sat on the board in the early years (1926-27) had changed. Those that remained from the startup years were Kissel, Niebel and Schippert.

⁶⁶⁾ Die Betrachtung der Situation der Firma im Hinblick auf ihre Marktlage, Protokoll 3.12. 1932, S.1.

Daimler-Benz during the 1920s, nothing like maintaining a firm, consistent management policy. Naturally, a number of elements appeared from this that would decide the company future direction. Nevertheless, we can say that these did not as yet form a unified combination and it was probably a chaotic situation that would later include many contradictions.

On the other hand, in the midst of the trouble in the German automobile industry as a whole, the Schapiro project failed after all and Schapiro got rid of his Daimler-Benz stock and broke away (1929). As a result, after regular progress Deutsche Bank financial control became complete ⁶⁷.

After October 1929, in the midst of the gradually deepening global panic, a particularly desperate scrambling toward management reform continued. Through Deutsche Bank, two management rationalization specialists were sent to Daimler-Benz ⁶⁸⁾. Due to the efforts of Max H. Schmid and V.d. Porten, rationalization advanced to the point where the company by June 1, 1931 was able to increase profit even on sales of 9,000RM. However, actual sales were already well below that (1930 sales were 9,900RM; 1931 sales were 6,900RM,). By November of the same year, a sales mark of 8,000RM was achieved, but that was soon reduced to the 7,000RM⁷⁰⁾ level. Nevertheless, in the presence of lower actual sales (1932 sales were 6,500RM), none of the rationalization policies were effective.

In this situation, with Daimler-Benz in a terrible crisis, we cannot overlook the increasingly strong criticism of governmental policy such as in the words of Kissel, who was gradually pushed out by key people, and also in the words of G. von Stauss 710, who was a director of Deutsche Bank and also sat on the Daimler-Benz auditors committee, Vorsitzende des Aufsichtsrates.

⁶⁷⁾ M. Kruk & G. Lingnau, 100 Jahre Daimer-Benz das Unternehmen, S. 128-129.

⁶⁸⁾ Hamburger Stiftung (Hrsg.), a. a. O., S. 92.

⁶⁹⁾ Ebenda, S. 93.

⁷⁰⁾ Hamburger Stiftung (Hrsg.), a. a. O., S. 93.

⁷¹⁾ Berliner Borser Courier vom 17.12.1932, Daimler-Benz, Dr. von Strauss gegen die Autozollpolitik, etc.