Chapter 3

Principles and Problems of Hospital Funding in Germany in the Twentieth Century

Axel C. Hüntelmann
(Charité—University Medicine Berlin)

Nearly every historical or contemporary publication dealing with health insurance and hospital economics in West Germany since the 1960s starts by complaining about the deficiencies of the current health care system and its lack of funding.[1] Be the authors hospital physicians, complaining about their out-dated or missing equipment, or politicians, railing against the rising costs of hospitals and medical technology, regardless of the money spent, it is never enough.

Since the late 1960s, numerous expert commissions, established by the government, have analysed and proposed reforms to the West German health care system and hospital funding. The result has been a near-perpetual reign of reform: no sooner has one structural reform been elaborated and implemented, than a new initiative gets underway designed to reduce health care costs, especially hospital expenditures.[2] As to the causes of the rise in health care expenditure, government officials and health care policy experts have identified ever more expensive technical equipment, an overcapacity of beds, and a general lack of efficient cost management. Hospital economists have suggested reducing bed capacities and improving hospital management, while

 10.5920/PoliticalEconomy.03

financial experts recommend competition between hospitals and health care institutions as a means of reducing costs. Such policy prescriptions have prompted German politicians, health care professionals, and patient groups to complain about an increasing economisation and commodification of health care.[3]

Although at a first glance the debate about the economisation of health care and insufficient hospital funding seems to be relatively new, in fact it dates back at least to the late eighteenth or early nineteenth century when the hospital became a "modern" medical institution.[4] But in contrast to the large number of political publications complaining about insufficient resources and suggesting improvements to hospital finance, there have been only a few publications addressing the history of hospital finance in Germany. Whereas for Britain there exists a rich literature on the history of hospital accounting[5] and finance,[6] for Germany there are only few local case studies, mainly focussed on the early modern period and the nineteenth century.[7]

Sometimes publications dealing with current hospital management issues sketch the history of hospital finance, but mainly as a pre-history to more contemporary developments or problems in the second half of the twentieth century.[8] And these publications pay scant attention to the socio-political and cultural historical background. Publications on the history of public health care in twentieth century Germany likewise ignore or marginalise hospital finance. The same is true for historical studies on medical institutions, which have focused first and foremost on hospitals and medical faculties during the national socialist era or—inspired by the work of Michel Foucault and because of rich source material—on the history of mental hospitals.

In light of these historiographic shortcomings, this text examines the principles and development of hospital funding and finance in Germany in the twentieth century and major shifts in this history. An analysis of hospital funding can facilitate broader insight into

the structure and financing of public health care in Germany. It also illuminates the interrelationship between health insurance and hospital funding, and the effects and problems it has spawned. As a consequence of the shift from care to cure, as hospitals were transformed into medical institutions in the nineteenth century, hospital expenses increased (as did national health care budgets). As part of this process, hospitals were forced to reduce costs at any price and, as I argue, in the last decades of the twentieth century the hospital's character changed from a charitable or welfare institution and a public enterprise, which served and was responsible to the community, into a profit-orientated enterprise. This transformation has led to ongoing conflicts between neo-liberal ideas and profit-driven goals on the one hand, and humanistic ideals and practical health care concerns on the other; conflicts between neo-liberal and social health care policy experts, between hospital managers, physicians and hospital staff. As both social welfare institutions and as important components of public health care systems, hospitals have for more than a century been hailed as features of modernity and progress, essential to the preservation of the healthy fighting and working bodies needed to defend the country (in the inter-national struggle for survival) and to enhance the national stock of human capital. But over the past few decades, with the rapid economisation of medicine and commodification of health care, health has been reduced to a cost-factor in debates about ailing public finances.

In addressing the principles and prehistory of hospital funding in Germany in the nineteenth and early twentieth century, this text relies on secondary literature on the history of hospitals, hospital finances, and public health care. For the second half of the twentieth century, the study is based on contemporary sources and manuals about hospital economics and management.

I will begin with a sketch of the German system of hospital finance, starting with principles that had evolved in the early modern period

 10.5920/PoliticalEconomy.03

and during the nineteenth century. Then I describe the establishment of statutory health insurance in the 1880s and its importance for hospital funding, followed by sections on changes during the Wilhelmine Empire, the Weimar Republic, and the 1930s. I then summarise the history of hospital finance in the 1950s and 1960s, before a longer section describes developments since the 1970s during a period of ongoing reforms. Due to limitations of space, these sections focus mainly on West Germany. I conclude by analysing the changes and problems of hospital funding in Germany during the twentieth century.

Pre-history of hospital finance in Germany until the introduction of statutory health insurance

The history of hospital finance in Germany (and especially the health insurance laws of the 1880s) is incomprehensible without taking account of its prehistory. In the middle ages and in early modern times, hospitals were commonly hospices, alms houses and infirmaries. At this time there was little difference between hospitals in German territories and other states.[9] This changed during an era of absolutist state-building and the establishment of statehood in competing German principalities. In absolutist states, population policy and public health care were issues of public order and the common good was deemed to be the responsibility of the state or sovereign, as articulated in publications on population policy by Johann Peter Süßmilch or on medical police by Johann Peter Frank.[10]

Up until the end of the nineteenth century, hospital operating costs were comprised mainly of expenses for staff, food, clothing, lighting, heating, and the maintenance of buildings and furniture. Medical treatment and instruments comprised only a small fraction of a

hospital's outlay.[11] The structure of hospital expenses changed after 1900, a development that also prompted efforts to increase hospital income, as we will see below.

In the early nineteenth century, hospitals were owned mostly by cities, the state or the church. The owners of large hospitals usually provided the land, buildings and various forms of funding. Having often originated from earlier donations of land or capital, hospitals generated income from capital interest or rents of land and houses, such as Hubertus-Spital in Düsseldorf or Julius-Spital in Würzburg,[12] or from contributions made by prosperous landed estates. Furthermore, some hospitals generated income from privileges granted to them by the state (like special customs, taxes or fees for certificates),[13] from cultivating land, or from profit yielded by the hospital's own household economy. Another important source of income was government or municipal subsidies granted especially for treating the poor. Hospital owners would normally reimburse hospitals for budget overruns.[14] University hospitals and medical schools were special cases: their educational responsibilities imposed additional costs which, in turn, had to be subsidised by the state. During the nineteenth century, as a proportion of hospital income, donations decreased rapidly, while at the same time state and municipal subsidies grew.[15]

By 1800, hospitals in Germany were already generating revenue from patient fees and this source of income increased rapidly during the nineteenth century.[16] Dating back to early modern times, guilds had 'rented' their 'own' rooms in hospices where members (especially journeymen) were cared for when sick or injured; and over time these arrangements evolved into hospital subscription schemes. Furthermore, since the early nineteenth century various forms of voluntary health and hospital insurance plans helped establish and fund hospitals.[17] In Bremen and Würzburg, for instance, associations of craftsmen and domestic servants were established to pay for members' hospital care

 10.5920/PoliticalEconomy.03

or treatment.[18] From the 1830s, population growth, urbanisation, and the erosion of traditional communities prompted municipalities to establish guild- and employer-based insurance schemes. As a result, from mid-century various forms of (sometimes mandatory) local health insurance or hospital subscription plans became a permanent source of hospital revenue. In the long run, it appears that the establishment of statutory health insurance in the German Empire in 1883 was part of a structural shift rather than a turning point or milestone in the history of the welfare state.[19]

Establishment of statutory health insurance in Germany and its consequences for hospital funding

In June 1883, the German government began implementing a statutory health insurance programme for industrial workers with an annual income less than 2,000 marks, soon to be followed by accident insurance in 1884, and old age pension insurance in 1889. Both workers and their employers contributed to the health insurance programme, which was based on principles of reciprocity and solidarity, meaning that every person paying contributions was entitled to certain benefits: visits to the doctor, medication, hospital care, and limited sick-pay were covered. *Prima facie*, the programme aimed to protect industrial workers in case of temporary illness and prevent them from becoming impoverished. In principle, however, the health insurance programmes merely centralised the existing system of municipal and regional health insurance schemes. Furthermore, health insurance was not the main focus of Bismarck's social security legislation and was designed only to bridge the period following an accident and to cover claims related to industrial injuries. For this reason, the benefits were limited to the

insured worker and did not extend to other family members. Furthermore, in the mid-1880s only about ten per cent of the population was included in the programme. And finally, the government established social insurance with the aim of pacifying and co-opting the working class after having implemented anti-Socialist legislation in 1878 that outlawed the Social Democrat Party and suppressed workers' rights to organise.[20]

In subsequent decades, statutory health insurance had—albeit often limited—consequences for hospitals and hospital funding because more people had access to and were able to afford hospital treatment. In addition, the number of people willing to visit hospitals was increasing, mainly for two reasons. First and foremost, with improvements in medical therapy more people placed their hopes in hospital treatment, resulting in a rise in the number of in-patient admissions. Second, older health funds had different payment schemes: most resolved claims by disbursing money directly to the member as compensation for lost income (or medical treatment); others executed payments for medical services directly to physicians or hospitals. In the first case, members often preferred to take the money, purchase medication, and remain home in order to avoid expensive hospital visits. After the introduction of statutory health insurance, members were compensated for income loss *and* had access to hospital care.[21]

After statutory health insurance had been implemented, a great number of local health insurance associations were founded and registered with the Imperial Insurance Office. Some of these associations had emerged from older associations of factory workers, guilds, and occupational associations. Of varying size, ranging from hundreds to thousands of members, these groups soon amalgamated into larger district organisations.[22] In subsequent decades, more and more workers and employees became members of health insurance funds, which in turn generated additional burdens on hospitals' administrative staff.

 10.5920/PoliticalEconomy.03

In general, a hospital charged patients for the number of days they had stayed at the hospital, based on a daily rate that covered hospital operating costs, like food and accommodation. At the end of a patient's hospital stay, in addition to the daily rates, hospitals also billed for more expensive medical treatments.[23] Billing procedures varied depending on the patient's status: if patients stayed at the hospital of their own account, they were billed directly and had to pay part of their bill in advance. If patients were insured or impoverished, they had to provide evidence of their membership of an insurance programme or present official certification of their indigence in order to ensure that their hospital expenses would be paid for by the municipal welfare authority. Costly medical treatment often had to be pre-approved by health insurance or welfare officials if they were to reimburse hospitals for the additional expenses.[24]

Changes in hospital funding around 1910

Between the 1880s and the 1910s, German society witnessed a demographic and sociopolitical sea change: the population grew rapidly from 41 million in 1871 to 64 million people by 1910, and people from the countryside migrated into overcrowded cities. Besides urbanisation, rapid industrialisation compromised the working and living conditions of large parts of the population. The German Empire became a leading industrial nation, entangled in numerous international conflicts in the era of imperialism. On the other hand, mortality rates declined as food production improved, infectious diseases were checked, new medical innovations were introduced, and new hospitals and other medical institutions were constructed. The health of the nation's population manifested itself in falling rates of mortality and morbidity; rising

numbers of hospital beds were considered to be signs of progress and modernity.[25] In Berlin, for instance, where the population more than doubled from 826,000 in 1871 to 1.9 million in 1900, the Charité hospital was complemented by four new community hospitals, founded between 1872 and 1906. The growing number of physicians trained at medical schools facilitated medical innovations and specialisation; in addition to municipal and confessional hospitals, numerous small private clinics were established, usually owned and operated by consultants, housed in regular apartments or houses, and often counting only a small number of beds.[26]

These developments not only increased the number of patients but changed their status as well. In 1883, only a small proportion of the national population had been eligible to benefit from statutory health insurance, but by 1914 nearly all sectors of production, trade and agriculture were included. In addition to workers, servants and craftsmen, salaried employees as well as their relatives could now also receive benefits.[27] Consolidated in district organisations, health insurance funds expanded their bargaining power vis-à-vis general practitioners. This led to a number of serious disputes between health insurance funds and physicians, to doctors' strikes, and to the foundation of the "Hartmannbund", a professional association aiming 'to protect the economic interests of physicians and the medical profession'.[28] By comparison, health insurance funds had little leverage when it came to bargaining with municipal and state hospitals which treated hundreds and thousands of patients. Funds offset this imbalance by diversifying the health care benefits they offered to their members.

As they incorporated new medical innovations and expensive therapies, hospitals modified their accounting practices and scheduled special tariffs for novel treatments like chemo- or serum therapy and for laboratory analyses and other diagnostic techniques like x-rays. After 1900 hospitals started to publish leaflets showing their

 10.5920/PoliticalEconomy.03

daily rates, dietary schemes and charges for medical services.[29] What started, for instance, at the community hospital in Düsseldorf around 1910 as a four-page leaflet soon became a twelve-page brochure in the 1920s.[30] As a consequence of these innovations, costs per patient rose from 11.05 marks in 1885 to 28.49 marks in 1914,[31] which spawned renewed complaints about rising costs for medical care and hospital treatment.[32] But beyond treatment usually covered by health insurance, special services were listed for different classes of patients. For example, the brochure of the Düsseldorf community hospital listed additional services for first-class patients like special meals or larger hospital rooms.[33] The differentiation helped to attract middle- and upper-class patients who might previously have avoided hospitals which were still struggling to overcome their reputation as working-class or pauper institutions. By offering more expensive services and accommodation, hospitals could generate additional income directly from the patient. These additional services point to a characteristic of the German system that is valid to this day: hospitals charge standard rates for medical services covered by statutory health insurance, but alternatively, if patients are enrolled in private health insurance plans (or willing to pay additional expenses on their own), they can receive extra services.

Another characteristic of German health insurance funds was their autonomous self-administration, with employees and employers equally represented in their supervising committees.[34] Employee representatives tried to expand—often successfully—the range of medical services covered by their plans,[35] helping to attract new members in competition with other funds.[36] A steady influx of new, healthy employees allowed funds to provide more generous benefits. But for smaller funds, a few cases of severe illness could put their solvency at risk. It turned out that many smaller funds had overextended themselves, forcing them to either reduce their benefits or go bankrupt. On occasion the Imperial Insurance Office had to intervene. As a consequence of these risks, social

security programs were substantially revised, and the Imperial Insurance Code enforced in 1911. The so-called *Reichsversicherungsordnung* came into force on 1 January 1914 and remained essentially unchanged until the 1970s. The new code standardised funds and services, enlarged the group of people included in statutory health insurance, diminished the influence of employees in the committees and prescribed that health insurance funds had to have a minimum number of members. All these measures were thought to consolidate the funds' financial situation and reduce the risk of bankruptcy.[37]

Changes in hospital funding in the 1920s

The First World War and post-war turmoil delayed the effects of the Imperial Insurance Code on hospitals and hospital finance until 1919. Indeed, well into the 1920s, hospitals confronted a number of severe problems which can be illustrated using the example of the Charité hospital in Berlin. During the war, many Charité physicians had been called up for military service causing a shortage of staff at a time when hospitals also had to treat wounded soldiers. In addition to the political turmoil,[38] the war's effects on public health saw hospitals struggling to cope with rising numbers of patients, especially invalided veterans and malnourished patients with deficiency diseases. Food shortages, rising prices and ultimately the hyperinflation of 1923 all placed severe strains on hospital finances.[39] Staff wages were also rising: before the war it had been common for nurses and ward staff to work ten to twelve hours a day; but at the end of the war public institutions were forced to pay standard wages and implement the eight-hour workday. Thus, hospitals had to hire additional staff to compensate for the reduced working hours.

 10.5920/PoliticalEconomy.03

The Charité also faced additional problems specific to its role as a military hospital, subsidised by the war ministry and responsible for educating and employing military surgeons. The demobilisation of military staff caused further personnel shortages and a reduction in subsidies, thus requiring new civilian staff to be hired and again boosting personnel costs.[40]

All of this turmoil was reflected in the hospital's accounting practices during and after the war: since 1915, no regular budget had been drafted; the budget for 1916 had simply been extended every year until 1924; and the Charité operated on quarterly financial reports used to justify ongoing state subsidies. Whereas before the war hospital administrators had meticulously calculated daily catering rates, after the war existing rates were simply adjusted for inflation.[41]

One way of dealing with rising expenditures and generating more revenue involved increasing the daily catering rates or the fees charged for medical services and treatment. But galloping inflation soon made the calculation of daily rates impractical. Furthermore, at times of hyperinflation, the pre-payment of hospital charges became problematic in the case of long-term patients. And because economic turmoil exacerbated the inability of patients and health insurance funds to pay for medical services, the hospital's outstanding accounts ballooned and often remained unsettled for longer periods of time, sometimes having to be written off entirely. To make a long story short: expenditures rose much faster than income, generating enormous deficits. Public hospital owners, who previously had subsidised these deficits, now shortened or cut public funding due to their own financial straits. To finance short-term funding gaps, hospitals like the Charité accumulated enormous liabilities which came due in the post-war period. Although the situation stabilised after the currency reform in 1924, tensions remained well into the 1920s and were revived five years later by the global economic crisis and the Great Depression.[42]

Exacerbating these difficulties, health insurance funds did not simply acquiesce to rising daily hospital rates. As a result of the Imperial Insurance Code, health insurance funds had merged and, representing thousands of insured members, had become large and powerful organisations. Faced with their own financial challenges, health insurance funds also had to cut spending drastically and began pushing general practitioners into contracts with lower fees for medical treatment or establishing so-called ambulatories (*Ambulatorien*),[43] i.e. out-patient polyclinics run and staffed by health insurance funds themselves. General practitioners and hospitals viewed these facilities as a major threat to their market dominance in the area of medical services.[44] Health insurance funds also began to question the amount and composition of daily hospital rates in the 1920s. For instance, one local health insurance fund (AOK) asked the Municipal Hospital in Düsseldorf why its daily rates were higher than those of other local and regional hospitals.[45] Rising costs and the composition of rate-schedules became an on-going topic in discussions between health insurance funds, hospitals and public health institutions.[46]

Also in the mix were a diverse array of private clinics that had evolved especially since the 1890s. Some of these facilities counted only a couple of beds and were located in apartment blocks, often in the neighbourhood of a consultant's practice. Medical school professors sometimes 'owned' these private clinics or else they rented and maintained rooms or beds in larger hospitals, where they treated wealthy patients. Often these clinics existed only for a couple of years and then vanished. These private clinics, with the notable exception of larger sanatoria, were relatively small; they filled a medical niche, and their owners were consultants or medical specialists. Furthermore, they were often exclusive, offering specialised, costly, or alternative treatments. And because they were not registered and reimbursed by health insurance schemes, conflicts between them were rare.[47]

 10.5920/PoliticalEconomy.03

After a short period of economic stability, discussions about cost cutting started all over again during the world economic crisis in the early 1930s. In these conflicts, funds became even more important because nearly all professional groups and their family members were covered by statutory health insurance. In addition, the introduction of unemployment insurance in the 1920s saw the unemployed also being covered by health insurance funds, as were retirees in the 1930s. At the beginning of the 1930s, payments from health insurance funds had become the main source of hospital income.[48] However, disputes about hospital financing demonstrate the plurality of actors involved in negotiations on different institutional, local, regional, and national levels: health insurance funds representing employers and employees, physicians and other medical practitioners, as well as hospitals (all of which were represented by their respective district or national associations) interacted with public health and regulatory institutions, like the Imperial Insurance Office or the Ministries of Interior or Health, with municipalities or public-private corporations (like the Red Cross or the church), or other hospital owners, and finally even with political parties of all stripes. But in subsequent years, this pluralism came to an end.

The monistic structure of hospital funding and other changes in the National Socialist era

After the National Socialist Party had come to power, it used the conflicts between hospitals, practitioners and insurance funds as an occasion to intervene in health policy and restrict the contractually-agreed rights of health insurance funds, physicians and hospitals. As concerns hospital funding,[49] these restrictions began in August 1933 when health insurance funds were prohibited from offering health care services like

the above mentioned ambulatories.[50] In addition, a third-party agent was installed to mediate between and resolve conflicts of interest: the Association of Statutory Health Insurance Physicians [*Kassenärztliche Vereinigung*]. The Association negotiated fees and prices centrally and processed the settlement of bills and the distribution of payments. Only physicians who were organised in this centralised and semi-public association were allowed to bill insured patients and, vice versa, payments for insured patients were processed through the Association. *Prima facie*, the Association should pacify conflicts between health insurance funds and physicians. But the closure of out-patient facilities run by health insurance funds was designed to dismiss Jewish and socialist physicians who often held these posts. The *Kassenärztliche Vereinigung* became an obligatory and narrow clearing house for insurance payments and, because only 'Aryan' physicians could become members of the Association, Jewish (and socialist) practitioners were excluded from this vital source of income. They were only allowed to treat private Jewish patients, and, for a while, to work in privately-run clinics. The foundation of the Association has to be understood as an effort to centralise and exploit social policy for nationalist bio-politics, embedded in the realisation of the race-based eugenic-state. In addition, the establishment of the *Kassenärztliche Vereinigung* further co-opted physicians and their professional organisations into the Nazi-state.[51]

Additional political interventions in 1936 had an enormous impact on hospital funding. Until then hospitals had been increasing daily rates to finance rising expenses. As a consequence, public spending for hospital treatment continued to rise. The so-called Price-Stop-Decree (*Preis-Stopp-Verordnung*) fixed prices for medical care and treatment and was not rescinded until 1948. Furthermore, as part of the enforced political co-optation affecting all fields of medicine, the so-called monistic principle of hospital funding had been implemented. Heretofore, hospitals had been free to enter into

 10.5920/PoliticalEconomy.03

contractual arrangements with private persons, insurance funds, and municipalities (or federal states) and could subsidise the construction of new buildings or expensive equipment (beside budgeting deficits). But the new law stipulated that all income had to originate from *one* single (monistic) source. The duration of a patient's hospital stay was calculated using a centrally fixed daily rate that took into account expenses for food, staff and maintenance; and medical treatments were calculated using a fixed expense ratio and the sum for care and cure billed to (and financed by) the patient's health insurance fund. In principle, hospitals' income from health insurance funds had to cover all of their costs (*Selbstkostendeckungsprinzip*).[52] Medical schools were able to apply to the Ministry of Education for extra money to pay for scientific equipment and expenses related to teaching.

The monistic principle also affected direct payers. In 1936, self-employed individuals or those with high levels of income (above the assessment ceiling and thus exempt from social security contributions) could pay hospitals directly. But with the implementation of the monistic principle this was no longer possible, forcing these individuals to insure themselves in so-called private medical insurance funds.[53]

The so-called monistic principle represented the starting point of direct state intervention and regulation of hospital organisation: hospitals were obliged to enter into contracts; prices for care and medical treatment were fixed; health care administrators centrally planned the supply of hospital beds and the construction of hospitals (*Krankenhaus- und Bettenbedarfsplan*); and hospitals were financed solely by statutory or private health insurance funds. This led to two main problems for the future. Although regulated by the state, hospital funding remained difficult, especially during the war.[54] In addition to implementing general cost reduction programmes, hospital administrators tried to compensate for deficits and funding shortfalls by suspending maintenance work or deferring necessary

capital investments. Second, hospitals became dependent on health insurance funds as their sole source of revenue, a problem which, as we shall see, preoccupied administrators for decades to come.

Hospital funding in the post-war period through the late 1960s

During and after the Second World War, the entire welfare and health care system collapsed. On the one hand, the situation was similar to that after the First World War: wounded soldiers and invalids returning home needed urgent medical treatment, infectious diseases like tuberculosis and deficiency diseases drove a steady stream of patients into already overcrowded hospitals, while at the same time one third of the health care infrastructure, including hospitals, had been damaged or destroyed.[55] On the other hand, everything remained unchanged: hospitals were generally operated by municipalities (92%) and to a lesser extent by churches (5%) and private owners (3%); hospital fees were still fixed at 1936 levels and the monistic system of financing continued. In the initial chaos of the post-war era, hospitals complained that financial restrictions prevented them from guaranteeing proper care and cure. In June 1948 price controls ended on medical services and daily hospital rates (*Preis-Freigabe-Anordnung*). But in response, a couple of months later, health insurance funds complained that without price controls, they would go bankrupt. And so again, rates for daily care and medical treatment were fixed, but this time at a higher level than before (*Pflegesatzanordnung*).[56]

After the currency reform and the foundation of two different German states, further adjustments became necessary in West Germany. There, in September 1954, the government passed a law implementing rules on hospital fees.[57] Subsequently, a commission consisting of members of the health insurance funds, hospitals and civil servants from the Federal

 10.5920/PoliticalEconomy.03

Health Office and later from the Federal Ministry of Health negotiated the daily rates and fees for medical treatment and regularly adjusted them to account for inflation.[58]

The implementation rules stipulated that hospital fees cover the institution's own operating costs (*Selbstkosten*), including food, accommodation, medical treatment and basic maintenance. Marie-Theres Starke has shown that the term *Selbstkosten* meant different things depending on whether an institution was a charitable or a business enterprise: in the fee schedules of charitable institutions there was no accounting for profits or for interest rates on equity capital. But more importantly, there was no provision for long-term capital investments in larger medical devices nor for the construction or restoration of war-ravaged physical plant.[59]

De facto, the daily rates led to an under-funding of health care institutions. Ultimately, deficits had to be covered by hospital owners or bank loans. Analysing the long-standing structural causes of the deficits, Starke pointed to the charitable origins of hospital financing which had tended to separate donations for land and buildings and the overall planning of bed-capacities from the hospital's ongoing fee-based economy and operating costs.[60]

In the context of these concerns, health insurance funds played an ambiguous role. Like hospitals, they too were part of the commission charged with negotiating health care fees. But since hospitals' main source of revenue was derived from patient fees paid for by health insurance funds, the funds had no interest in higher fees. Moreover, neither the funds themselves nor anyone else believed they should be responsible for constructing hospitals or promoting technical innovations. In addition, the West German government was loath to increase the health insurance rates in order to finance the modernisation of hospitals. Government officials feared that rising health insurance contributions would increase labour costs and threaten the competitiveness of Germany's still fragile post-war economy.

All of this points to a fundamental problem of the monistic principle of hospital funding in twentieth-century Germany: hospitals' dependency on health insurance funds as their sole source of income exposed them to the interests of employers and employees and tied their financial wherewithal to the vagaries of the market economy. Economic recessions forced hospitals do draw on their reserves, resulting in technical equipment and hospital buildings (much of which dated back to the 1930s or the turn of the century) becoming outdated in the 1950s and 1960s. Physicians complained about inadequate equipment and about German medical science falling behind international standards.[61] As early as the 1950s, contemporary concerns about the investment backlog led to renewed calls by politicians and health care policy experts for a reform of hospital funding.[62]

The following discussion focuses on West Germany for two main reasons. At first, the development and problems of hospitals as such in West and East Germany were quite similar until the 1960s. Franz Knieps and Hartmut Reiners have concluded that, due to deferred investments, there was little difference between hospitals in West and East Germany until the 1970s.[63] And second, the system of hospital funding and the debates about lacking money, beginning in the 1960s in West Germany, continued onwards in the 1990s in the unified Germany. Nevertheless, it has to be mentioned that the funding of hospitals in East Germany was quite different. Social security and the health sector, and hospitals as part of it, were financed partly by workers' and employees' social security contributions, organised and administrated by the Free Federation of German Trade Unions (FDGB) and by direct state subsidies. According to the type and size of a hospital, the money was re-distributed using centralised expenses- and bed capacity-plans. Booklets about health economics and hospital funding published mainly undifferentiated figures about increasing amounts of money successfully spent on health and hospitals. Thus, complaints about crumbling buildings, lack of

 10.5920/PoliticalEconomy.03

medicine and out-dated equipment were not discussed in public as in West Germany, though people could write petitions to governmental authorities, asking for instance for additional medicine or specific medical treatments.[64]

The shift from monistic to dualistic funding in the early 1970s

In the 1960s, several attempts were undertaken to reform the system of hospital funding in West Germany, which by 1966 had seen hospital deficits balloon to 1.355 billion marks. The Federal Minister for Employment drafted two bills—both of which were opposed by various interest groups and ultimately rejected—and created a commission with the task of evaluating the effectiveness of the social security system.[65] The Ministry of Health, headed by Elisabeth Schwarzhaupt, created another commission tasked with evaluating the hospitals' financial situation, their demand for new buildings and their need for new technical investments. This commission's report, the so-called Hospital Enquête of 1969, concluded—not surprisingly—that the existing structure did not ensure adequate medical care for the population and that hospitals produced an annual deficit of between 800 million and two billion marks.[66] The commission's suggestions were included in a new law that came into effect in June 1972: The Hospital Funding Law (*Krankenhausfinanzierungsgesetz*).

The Hospital Funding Law represented a fundamental shift in the system of hospitals finance. It replaced the monistic funding structure with a so-called dual structure. Patient fees, charged and invoiced by hospitals to health insurance funds for the care and medical treatment of their members, remained a key source of hospital revenue. But the construction of new buildings, the modernisation of older ones and

investment in new technical equipment were now financed directly by federal and state governments. Ensuring adequate health care infrastructure, especially a sufficient number of hospital beds, came to be defined as a public task.

The Hospital Funding Law sought to combine divergent aims. First, the law aimed to secure the economic viability of hospitals and put their finances on a sound footing. Second, the law was designed to ensure adequate health care for the general population. And third, these aims needed to be achieved within the framework of socially acceptable social security contribution rates. The dual funding structure sought to ensure, on the one hand, the modernisation of hospitals and medical care. On the other hand, state funding of capital investments was intended to ensure that social security and health insurance contributions would not increase and thus put German companies and the economy in general at a disadvantage in international competition.[67]

As a consequence of the new law, the investment backlog was eliminated and a decade of major investment in modern equipment and new buildings ensued. The state's commitment to investment in health care infrastructure occurred against the backdrop of a sea change in German politics. Until the end of the 1960s, liberal-conservative governments (Christian-Democrats in coalition with Liberals) focused on economic growth and a balanced budget. The Social Democrats joined the conservative government as junior partners in 1966 and in 1969 became the ruling party, changing the political landscape of West Germany.[68]

After the reconstruction of Germany and the 'economic miracle' of the 1950s and 1960s, Social Democrats embarked on policies of economic redistribution. Although the oil crisis pushed the West German economy into recession in 1973 and threatened to upend increased spending on health care infrastructure, Social Democrats embarked on a policy of deficit spending in hopes of stimulating the economy.[69] The money spent by the state on investments in hospital infrastructure tripled from

10.5920/PoliticalEconomy.03

one billion marks in 1972 to 3.5 billion in 1973, while expenses incurred by hospitals for treatment and care and paid for by health insurance increased from 9.4 billion marks in 1972 to 25.4 billion in 1980.[70]

Soon, conservative politicians and health insurance funds complained about skyrocketing costs in the health care sector, predicting the system's imminent collapse. New technical devices and large-scale equipment (like computer tomography and magnetic resonance imaging), and the computerisation of medical diagnostics helped to drive costs upward. In general, the costs of medical treatment and care rose and health insurance funds accrued debts which they tried to compensate by raising health insurance contributions from 14% of earned wages (half of which was paid by the employer and half by the employee) in 1967 to 19.2% in 1985. In the mid-1970s, the Christian Democratic Minister of Social Affairs in the state of Rhineland-Palatinate, Heiner Geißler, warned that the total expenditure for health care was on track to triple and the employee's health insurance contribution would increase from 8.1% to 13.1% of earned wages. In this context, Geißler introduced the politically controversial and polemical term "cost explosion" (*Kostenexplosion*).[71]

In addition to expansive and expensive investments, other aspects of the Hospital Funding Law were also subject to scrutiny in the 1970s. Critics lamented the lack of effective cost control mechanisms and complained that hospitals were wasting public money. In general, more and more voices raised doubts about whether hospitals were a public good and the public's responsibility, reinvigorating claims that hospitals produced marketable services just like other enterprises.[72] Furthermore, since 1972 the federal government had calculated the demand for hospital beds centrally in an effort to overcome the backlog in infrastructure investment. Since these investments also affected the outlays of the federal states (which were responsible for a portion of the infrastructure spending), the states now criticised the

federal government's mismanagement and demanded a greater role in decision-making processes.[73]

In an effort to put the genie of rising costs back into the bottle, the German parliament adopted a law in 1977 designed to reduce expenditure on medical treatment, but the law had little impact and was followed by another in 1981 designed to cut back on the benefits provided by health insurance funds.[74] In contrast with earlier efforts, the 1970s heralded the beginning of an era of ongoing health care reform. As each reform agenda was enacted into law, another would follow to offset the problems created by the preceding legislation.

Restructuring hospital finance since the 1980s

In 1982, a new conservative-liberal government assumed power and tried again to rein in rising expenditure on hospitals and health care. In December 1984, a new reform bill restructuring hospital planning and finances passed the parliament (*Krankenhaus-Neuordnungsgesetz*). Henceforth, two principles of hospital finance and accounting changed. First, the responsibility for hospital planning and finance passed from the federal government to the states. As a result, tariffs for care and cure were no longer centrally mandated by the federal government, but negotiated between hospitals and local health insurance funds.[75] The second involved cost management and was designed to counter accusations that hospitals wasted public money. Prior to the new legislation, hospital accounting was governed by an ex-post principle: it was not until the end of a patient's hospital stay that the various costs were calculated according to official tariffs and charged to the patient's health insurance fund. Thus, hospitals could generate income only when beds were occupied. This led politicians to insinuate that patients had been kept in

 10.5920/PoliticalEconomy.03

hospitals longer than necessary and to complain that hospitals had no incentive to discharge patients earlier. In order to prevent this kind of malpractice, hospitals would in future have to calculate their occupancy rates in advance, as part of a national estimation (*Bettenbedarfsplan*), and based on this forecast hospitals were assigned a budget.[76] Another bill called the hospitals' charitable character into question by allowing them to turn a profit. It introduced a so-called flexible budget—meaning that savings from a previous accounting period could be transferred to the following period.[77] According to the neo-liberal *zeitgeist* of the 1980s, the aim was to allow hospitals that saved money to use it for other purposes, like research or technical equipment, while punishing the wasteful. Both laws implied a break with the long-standing principles of total cost reimbursement and ex-post accounting.

During an initial transition period, prospective budgeting was easy since the budget only had to be submitted for the current year. But in subsequent years, it became more difficult because both the budget and prospective bed occupancy rates had to be submitted ex-ante for the previous year. The new budget principles caused numerous problems, mainly because of the divergence between estimated targets and real-life numbers. And some hospitals were better situated to deal with the new rules than others, for instance hospitals in regions with older populations or treating patients suffering from chronic diseases faced disadvantages compared to those in regions with a younger and healthier population. Because the treatment of some diseases, like hemolysis, dialysis or organ transplantations, was particularly expensive, just a few such patients in one hospital's district could wreak budgetary havoc. Beside these imbalances, hospital administrators complained about the increased bureaucratic burdens of the new accounting techniques.[78]

And yet, in spite of these changes, key problems remained unsolved. Declining rates of mortality and morbidity since the Second

World War were resulting in an older population with more chronic diseases. Patients and employers were becoming more demanding as rising health insurance contributions raised expectations about the quality of medical services. And as the health care system expanded, the growing influence of lobby groups, each in competition for resources, was not just making root and branch reforms more difficult, but also further transforming health care into a commodity with high profit margins, especially for pharmaceutical companies and manufacturers of medical equipment. All of these problems intensified after German unification in 1990 as East German hospitals were renovated and integrated into the West German system of hospital financing.

The hospital system produced a number of imbalances, such as the treatment of patients suffering from cost-intensive diseases, unpredictable increases in patient numbers (due to an epidemic or the closure of a nearby hospital), or an atypical age structure (in rural areas). In order to manage these imbalances, exceptions were clearly defined and cost-intensive diseases were allowed to be accounted for separately. Over time, ever more exceptions were made and in the 1990s the whole system was—again—revamped by a number of new laws.[79] The introduction of so-called case rates, as formulated in the 1993 Health Structure Law (*Gesundheitsstrukturgesetz*), superseded the calculation of daily rates for bed occupancy and represented another decisive shift in accounting practices. Accordingly, each disease was allotted a 'normal' number of occupancy days. If a patient with a certain disease was discharged earlier, the hospital made a profit; if the patient stayed longer, the hospital lost money. Overall, it was assumed that profits and losses would cancel each other out. But this mode of accounting caused numerous problems: what happened if a patient had been released too early or if complications arose? And what happened if a patient was transferred to another hospital? And again, this change did nothing to address the hospital financing system's main problems and contradic-

 10.5920/PoliticalEconomy.03

tions: predicted treatment vs. actual treatment; targeted costs vs. actual expenses; fixed estimated costs vs. varying actual costs; projected vs. actual patient numbers; not to mention the fundamental contradiction between health as a commodity vs. health as a public good.[80]

Throughout the twentieth century the proportion of private clinics remained small. In 1991, a quarter of all hospitals (358 in relation to 2,050 in public and charitable ownership) were privately owned. Beside those owned by charitable foundations or the Red Cross, they often had only a small number of beds, were led or owned by consultants and offered special or alternative treatments—not covered by health insurance schemes. Other private clinics were sanatoria-like rehabilitations centres. But since the 1990s, after hospitals were allowed to make profits, some hospitals turned into commercial enterprises, some entrepreneurs already active in the health sector bought former municipal hospitals. Since the 1990s the number and size of these commercially operated hospitals has risen and even university clinics have been taken over (now 707 privately owned / commercially operated hospitals in relation to 1,244 in public and charitable ownership),[81] while the number of public, charitable and municipal hospitals decreased and a larger number of unprofitable hospitals were closed and overall the number of hospital beds decreased rapidly.[82]

In 2000, the new coalition government of Social Democrats and Greens reorganised hospital finances again and a number of structural reforms (the so-called *Gesundheitsreform*) were introduced, resulting in a variety of further state interventions.[83] These reforms drew on US accounting practices that posited a fictional calculation-unit "diagnosis" that was more detailed than the previous case rate. This "diagnosis"-unit became the new basis for the reimbursement of medical care and treatment. Hospital physicians now had to classify patients' diseases exactly, including (various) secondary diagnoses, as well as their healthiness. The amount that health insurance funds were charged for a patient's

treatment depended upon that patient's "Diagnosis Related Group" (DRG). The detailed classification according to the DRG was designed to minimise the gap between ex-ante forecasts and actual results. But it involved immense administrative efforts—and in the end, the problems remained unresolved.[84] Furthermore, case rates and other success-oriented accounting systems caused other problems. Cases were sometimes diagnosed differently, for instance a normal delivery was less expensive than an abdominal delivery (C-section). The problem arose that doctors began choosing more expensive alternative therapies: the rate of C-sections increased rapidly in the 1990s as did surgical operations for disc prolapses (instead of time-consuming physiotherapy). At the same time, patients were discharged much earlier than in the 1980s or as early as possible and often patients were transferred to short-term nursing facilities (which they had to arrange and pay for themselves) or discharged so early that medical complications arose.

Conclusion

In general, there are three historical eras of hospital funding distinguishable in Germany. Prior to the 1930s, nearly anything was possible: in a pluralistic field, various actors were involved in negotiating tariffs and hospitals had different sources of income and the freedom to contract out their services. Between 1936 and 1972 hospital funding was characterised as monistic: hospital revenue was derived solely from (private and statutory) health insurance funds for medical services rendered to their members. In 1972, the monistic structure of hospital funding was transformed into a dualistic one: health insurance funds reimbursed hospitals for medical services and the state financed buildings and technical infrastructure.

10.5920/PoliticalEconomy.03

In this chapter, I suggest a fourth historical phase, starting in the mid-1980s and characterised by permanent hospital finance reform, by continuous state intervention (and corrections) and by the conviction that neoliberal incentives and reward systems could reduce hospital costs. During this fourth phase, the notion of public health as a common good was replaced by the neoliberal notion of health as a commodity. Since the 1980s, hospitals have been able to either (rarely) turn profit or (more often) record losses. As a result, hospitals tried to find other sources of income, reduced their labour costs, merged, or closed. In rural areas, where hospitals had to provide less densely populated areas with an older population, politicians complained about lacking hospitals and insufficient health services. Paradoxically, since the 1990s the health industry has been identified as an important stimulus to the national economy and health economists have enthusiastically debated the commercial and economic potential of the health care market. At the same time, however, those same economists have criticised rising costs in the health care sector (and hospitals as indirect consumers of medical products).

In the 1920s, health insurance funds became the most important, and in the 1930s the only, funding source for public hospitals in Germany. This caused various problems. First, statutory health insurance had been established originally as an insurance programme for industrial workers. As further groups came to be included in the programme, health insurance funds began to contribute the lion's share of revenue for hospitals that served the medical needs of all groups of the population. Furthermore, hospital income depended on the national economic well-being because the funds' contributions were paid by employers and employees. During recessions funds collected fewer contributions and came under increasing pressure to save money. Furthermore, the financial situation of hospitals hinged on other expenses such as those for practitioners or drugs. If the overall cost of drugs rose,

hospital finances were also indirectly affected because insurance funds were under pressure to save money. The fixed income of hospitals explains why German manuals on hospital economics focused primarily on bed capacity planning, expenditures, and, since the 1980s, efficiency.

The public image of hospitals changed in the 1970s. Until then, they were considered to be welfare institutions and an important part of the infrastructure of a healthy society (which in turn was seen as a basis for a stable political order),[85] to be a public good, and to be icons of modernity and national economic strength. This changed in the 1980s under neo-liberal governments. Hospitals and other community tasks were re-defined merely as cost factors—like patients—or as entrepreneurial profit-centres.

But this latest phase in the development of hospital financing is confounded by at least four paradoxes. First, for a long time it seemed to be a consensus in Europe that hospitals were not profit-orientated businesses but public responsibilities. Hospitals that try to find new fields of income, offer more expensive services, or regard patients as sources of profit are liable to be criticised for unethical behavior. Second, within a fixed state-controlled environment that restricted their sources of income, imposed contractual obligations, and fixed the prices they could charge for their services, hospitals were forced to act like entrepreneurs. This led, thirdly, to the paradoxical situation that, under neo-liberal auspices, hospitals were defined as profit-oriented enterprises which at the same time had to draw up annually ex-ante cost and income plans and to justify deviations from the plan in ways reminiscent of socialist economic policies. Fourth, longer life expectancy and more sophisticated medical equipment has certainly led to rising expenditure in the health care sector. Ever since the 1960s, resources have been scarce and experts have been predicting the system's bankruptcy. But it is misleading to suggest that insufficient funding will persist merely because hospitals act like entrepreneurs. In the end, hospital financing seems to have been

10.5920/PoliticalEconomy.03

played as a zero-sum accounting game: money saved at one hospital was missing at another, a surplus in one period was a loss in another, and a short term profitable strategic advantage at one juncture could become a costly disadvantage at another. Through it all, enormous resources of time and money have been eaten up by endless reforms to an immense administrative accounting system.

Acknowledgements

This book chapter is part of a broader project on accounting and bookkeeping in medicine in Germany and Britain between 1750 and 1950. I would like to thank Alfons Labisch, Fritz Dross, and the editors of this volume for their comments and advice on earlier versions of the chapter.

1. In addition to countless articles in newspapers and magazines (the news magazine Der Spiegel, for instance, had a thematic issue [No. 50] in 1970 titled: Is the hospital broke [Ist das Krankenhaus pleite?]), there is an overwhelming amount of literature lamenting insufficient funding and health care infrastructure. For example, for the 1960s, see Max Kibler, Das kranke Krankenhaus. Heilkunde im Spiegel unserer Zeit [The Sick Hospital] (Stuttgart: Hippokrates Verlag, 1962); for the 1970s, Harald Clade, Das kranke Krankenhaus. Reform der inneren Struktur [The Sick Hospital. Reform of its Inner Structure] (Köln: Deutscher Industrieverlag, 1973); for the 1980s, Thomas Dersee and Stephan Dupke (eds), Bankrott der Gesundheitsindustrie. Eine Kritik des bestehenden medizinischen Versorgungssystems [Bancruptcy of the Health Industry] (Berlin: Verlagsgesellschaft Gesundheit, 1981) and Ernst Bruckenberger, Dauerpatient Krankenhaus. Diagnosen und Heilungsansätze [Permanent Patient Hospital] (Freiburg: Lambertus, 1989). See also the various yearbooks Krankenhaus-Report [Hospital Report], including such thematic issues as Krankenhausversorgung in der Krise? [Crisis of Hospital Care?] in 2010 and Strukturwandel [Structural Change] in 2015. Such pessimistic views have also been adopted in the historical literature. See for example the preface in Alfons Labisch and Reinhard Spree (eds), Krankenhaus-Report 19. Jahrhundert. Krankenhausträger, Krankenhausfinanzierung, Krankenhauspatienten (Frankfurt: Campus, 2001) or the concerns about the decline of the German welfare state in Gabriele Metzler, Der deutsche Sozialstaat. Vom bismarckschen Erfolgsmodell zum Pflegefall (Munich: Deutsche Verlags-Anstalt, 2003).

2. See for instance the implementation of the West German government's hospital enquête [Krankenhaus-Enquête] in 1969, the commission on hospital finance [Kommission Krankenhausfinanzierung] of the Robert Bosch Foundation dating from the early 1980, and various commissions in the 1990s on structural changes and health reform (Gesundheitsreform). On the reform efforts, see Douglas Webber, 'Krankheit, Geld und Politik. Zur Geschichte der Gesundheitsreformen in Deutschland', Leviathan. Zeitschrift für Sozialwissenschaft 16 (1988), 156-203; idem, 'Zur Geschichte der Gesundheitsreformen in Deutschland. II. Teil: Norbert Blüms Gesundheitsreform und die Lobby', Leviathan. Zeitschrift für Sozialwissenschaft 17 (1989), 262-300; Sebastian Bechmann, Gesundheitssemantiken der Moderne. Eine Diskursanalyse der Debatten über die Reform der Krankenversicherung (Berlin: edition sigma, 2007); Ingo Bode, 'Die Malaise der Krankenhäuser', Leviathan. Zeitschrift für Sozialwissenschaft 38 (2010), 189-211; Franz Knieps and Hartmut Reiners, Gesundheitsreformen in Deutschland. Geschichte – Intentionen – Kontroversen (Bern: Huber, 2015).

3. In contrast to Anglo-American countries, where the commodification of health and competition between physicians was part of the system, in Germany such commodification was sharply criticised. For a long time, health was instead regarded as a common state-regulated responsibility. Paul U. Unschuld has spoken here of a German Sonderweg. On this, and more generally on the commodification of health, see Paul U. Unschuld, Ware Gesundheit. Das Ende der klassischen Medizin (Munich: C.H. Beck, 2009); and Alexandra Manzei and Rudi

 10.5920/PoliticalEconomy.03

Schmiede (eds), 20 Jahre Wettbewerb im Gesundheitswesen. Theoretische und empirische Analysen zur Ökonomisierung von Medizin und Pflege (Wiesbaden: Springer VS, 2014).

4. See for instance the complaints about insufficient funds expressed by the former medical director of the Charité hospital in Berlin, Ernst Horn, Oeffentliche Rechenschaft über meine zwölfjährige Dienst-führung als zweiter Arzt des Königl. Charité-Krankenhauses zu Berlin nebst Erfahrungen über Krankenhäuser und Irrenanstalten (Berlin: Realschulbuchhandlung, 1818). And along similar lines a century later, see the reflections of the director in the Prussian Ministry of Cultural Affairs Otto Krohne, 'Die zunehmende Verteuerung unserer modernen Krankenanstalten und deren Ursachen sowie einige Vorschläge, ihr entgegenzuwirken', Ergebnisse und Fortschritte des Krankenhauswesens. Jahrbuch für Bau, Einrichtung und Betrieb von Krankenanstalten (Krankenhausjahrbuch) 2 (1913), 43-96.

5. See the review of Florian Gebreiter and William J. Jackson, 'Fertile Ground: The History of Accounting in Hospitals', Accounting History Review 25 (2015), 177-82.

6. See Martin Gorsky and Sally Sheard (eds), Financing Medicine. The British Experience since 1750 (London: Routledge, 2006).

7. See the contributions in Labisch and Spree (eds), op. cit. (note 1). For the Hubertus-Spital in Düsseldorf in the sixteenth century, see Fritz Dross, 'Their Daily Bread: Managing Hospital Finances in Early Modern Germany', in Laurinda Abreu and Sally Sheard (eds), Hospital Life. Theory and Practice from the Medieval to the Modern (Frankfurt: Peter Lang, 2013), 49-66. On early modern Nuremberg, see Ulrich Knefelkamp, Stiftungen und Haushaltsführung im Heilig-Geist-Spital in Nürnberg. 14.-17. Jahrhundert (Bamberg: self-publishing, 1989). On Franconian hospitals in the early nineteenth century, Eva Brinkschulte, Krankenhaus und Krankenkassen. Soziale und ökonomische Faktoren der Entstehung des modernen Krankenhauses im frühen 19. Jahrhundert. Die Beispiele Würzburg und Bamberg (Husum: Matthiesen, 1998). For hospitals in Berlin in the last third of the nineteenth century, see Jochen V. Pelz, Das Etatwesen der städtischen allgemeinen Krankenhäuser der Stadt Berlin um die Jahrhundertwende (1890-1900). Krankenhaus im Friedrichshain (8.10.1874), Krankenhaus Moabit (7.11.1882), Krankenhaus auf dem Urban (10.6.1890) (unpublished MD thesis: Free University Berlin, 1982). On nineteenth-century Munich hospitals, see Christian Scheffler, Das Krankenhaus Links der Isar zu München. Organisation und Finanzierung in den 1860er und 1870er Jahren (Herzogenrath: Murken-Altrogge, 1997).

8. See for instance Steffen Fleßa, Grundzüge der Krankenhausbetriebslehre, 2nd edn (Munich: Oldenbourg, 2010) and, regarding the history of hospital funding, esp. 132-42.

9. As a general overview, see Guenter B. Risse, Mending Bodies, Saving Souls. A History of Hospitals, (New York: Oxford University Press, 1999). On the German context, see Marie-Luise Windemuth, Das Hospital als Träger der Armenfürsorge im Mittelalter (Stuttgart: Franz Steiner, 1995).

10. On the idea of a strong state in (German) absolutism, cf. Ernst Hinrichs, Absolutismus (Frankfurt: Suhrkamp, 1986) and Heinz Duchardt, Das Zeitalter des Absolutismus, 3rd edn (Munich: Oldenbourg, 1998). Concerning the state's and municipal responsibility for public health care in Germany, see Calixte Hudemann-Simon, Die Eroberung der Gesundheit 1750-1900 (Frankfurt: S. Fischer, 2000), 43-50; and Fritz Dross, 'Health Care Provision and Poor Relief in Enlightenment and 19th Century Prussia', in Ole Peter Grell, Andrew Cunningham and Robert Jütte (eds), Health care and poor relief in 18th and 19th century northern Europe (Aldershot: Ashgate 2002), 69-111.On the role of medical police, see Bettina Wahrig and Werner Sohn (eds), Zwischen Aufklärung, Policey und Verwaltung. Zur Genese des Medizinalwesens 1750-1850 (Wiesbaden: Harrassowitz, 2003).

11. See the tables on expenditures in the chapters about Munich, Augsburg, Bremen and Mannheim in Labisch and Spree (eds), op. cit. (note 1); for Berlin, Pelz, op. cit. (note 7).

12. For Düsseldorf, see Dross, op. cit. (note 7) and for Würzburg, see Friedrich Merzbacher, Das Juliusspital in Würzburg. Vol. 2: Rechts- und Vermögensgeschichte (Würzburg: Oberpflegeamt der Stiftung Juliusspital, 1979). The proportion of income from interest amounted to 27 %. At the Municipal Hospital in Munich, income from foundations and charitable associations was 9 % in 1830 (in 1850 24 % and 7 %, in 1870 31 % and 1 %, in 1890 15 % and < 1 % respectively). See Andrea Wagner and Reinhard Spree, 'Die finanzielle Entwicklung des Allgemeinen Krankenhauses zu München 1830-1894', in Labisch and Spree (eds), op. cit. (note 1), 95-140, table 8, 117. At the Municipal Hospital in Augsburg, income from interest in the mid-1850s amounted to 30% (foundations / charities and donations comprised altogether 5%). See Willi Langefeld, 'Wie kann ein Krankenhaus Gewinn machen? Finanzierung und Betriebsergebnis des Allgemeinen Krankenhauses der Stadt Augsburg 1811-1914', in Labisch and Spree (eds), op. cit. (note 1), 141-177, table 6, 149.

13. For example, the Royal Charité Hospital in Berlin received tributes from its estate Prieborn. See the hospital's budget files at Humboldt University Archive, Charité Direktion (henceforth HUA CD), No. 35; for privileges, see the budget files for 1800 in HUA CD, No. 1354-5.

14. In the 1850s 11% of the overall budget of the Community Hospital in Augsburg was derived from the municipality. Cf. Langefeld, op. cit. (note 12), table 6, 149. At the Mannheim hospital, the proportion of subsidies varied in the late 1830s between 35% (1838) and 50% (1835). See Nils Gabler and Reinhard Spree, 'Die finanzielle Entwicklung des Mannheimer Krankenhauses 1835-1890', in Labisch and Spree (eds), op. cit. (note 1), 203-243, table 10, 227).

15. According to Reinhard Spree, 'Krankenhausentwicklung und Sozialpolitik in Deutschland während des 19. Jahrhunderts', Historische Zeitschrift 260 (1995), 75-105, table 1: 13-15% of Prussian hospitals in the 1880s were owned by the state, around 40% owned by municipalities, and 23% owned by the church or religious orders. The remaining fifth included other charitable foun-

10.5920/PoliticalEconomy.03

dations, hospitals of provincial or district ownership, hospitals managed by workers or miners' associations and privately owned hospitals. An overview about the hospital's sources of income in Germany around 1900 provides table 3 in 93 (I: 6% donations, II: 28% subsidies, III-V: 64% charges, VI: 2% others).

16. In 1800, the Charité hospital in Berlin received 25,000 Reichsthaler income from subsidies and 9,173 Reichsthaler from patient charges. In the late 1880s, the relationship had completely changed: subsidies from the Prussian state amounted to 256,955 Marks, whereas the income from patient fees added up to 889,000 Marks, see the Charité budgets in AHU CD No. 1357 and the triennial Charité budget for 1888/1891 in the Secret Prussian State Archive (GStAPK), HA I, Rep. 76 VIII D, No. 260. Similar at the Community Hospital in Munich: in 1830 subsidies amounted to 38% (in 1850: 13%, in 1870: 10%, in 1890: 4%, also the income from interest decreased), and patient charges to 16% (in 1850: 51%, in 1870: 50%, in 1890: 80%), see Wagner and Spree, op. cit. (note 12), table 8, 117.

17. On the history of health and hospital insurance see Dross, op. cit. (note 10); for southern Germany see Folker Förtsch, Gesundheit, Krankheit, Selbstverwaltung. Geschichte der Allgemeinen Ortskrankenkassen im Landkreis Schwäbisch Hall, 1884-1973 (Sigmaringen: Jan Thorbecke, 1995); Kilian Steiner, 'Grenzen und Potentiale einer frühen Krankenversicherung am Beispiel der Ersten Münchner Krankenhausversicherung 1813-1832', in Labisch and Spree (eds), op. cit. (note 1), 69-94; Christian Lehmann, 'Das Stuttgarter Katharinenhospital während des 19. Jahrhunderts zwischen Krankheitskosten-Versicherungskasse und Gesetzlicher Krankenversicherung', in Labisch and Spree (eds), op. cit. (note 1), 179-201; and for northern Germany Barbara Leidinger, Krankenhaus und Kranke. Die Allgemeine Krankenanstalt an der St. Jürgen-Straße in Bremen, 1851-1897 (Stuttgart: Franz Steiner, 2000). More generally concerning social and political problems, see Ute Frevert, Krankheit als politisches Problem 1770-1880. Soziale Unterschichten in Preußen zwischen medizinischer Polizei und staatlicher Sozialversicherung (Göttingen: Vandenhoeck & Ruprecht, 1984).

18. On the establishment of a solidarity association for male and female urban servants in the Franconian cities Bamberg and Würzburg around 1800, see Brinkschulte, op. cit. (note 7); Leidinger, op. cit. (note 17) describes various health and hospital insurance schemes in the city republic Bremen in the mid-nineteenth century.

19. See Frevert, op. cit. (note 17); see Dross, op. cit. (note 10); and Ernest P. Hennock, The Origin of the Welfare State in England and Germany, 1850-1914. Social Politics Compared (Cambridge: Cambridge University Press, 2007). Then as now, the German Statutory Health Insurance had been described as a role model for other states, see Gerhard A. Ritter, Sozialversicherung in Deutschland und in England. Entstehung und Grundzüge im Vergleich (Munich: C.H. Beck, 1983); Ernest P. Hennock, British Social Reform and German Precedents. The Case of Social Insurance 1880-1914 (Oxford: Clarendon Press, 1987); for the US, John E. Murray, Origins of American Health Insurance. A History of Industrial Sickness Funds (New

Haven: Yale University Press, 2007), 37-40.

20. See Förtsch, op. cit. (note 17), 17-30. Regarding the development and motives of the law, see Ritter, op. cit. (note 19), 28-41; Hennock, op. cit. (note 19), 155-165; Dross, op. cit. (note 10); Peter Rosenberg, 'The Origin and the Development of Compulsory Health Insurance in Germany', in Donald W. Light and Alexander Schuller (eds), Political Values and Health Care: The German Experience (Cambridge: MIT Press, 1986), 105-26; Florian Tennstedt, 'Die Errichtung von Krankenkassen in deutschen Städten nach dem Gesetz betr. die Krankenversicherung der Arbeiter vom 15. Juni 1883. Ein Beitrag zur Frühgeschichte der gesetzlichen Krankenversicherung in Deutschland', Zeitschrift für Sozialreform 29 (1983), 297-338; idem, Sozialgeschichte der Sozialpolitik in Deutschland. Vom 18. Jahrhundert bis zum Ersten Weltkrieg (Göttingen: Vandenhoeck & Ruprecht, 1981), 165-174; and idem, Sozialgeschichte der Sozialversicherung, in Maria Blohmke et al. (eds), Handbuch der Sozialmedizin. Vol. 3: Sozialmedizin in der Praxis (Stuttgart: Ferdinand Enke, 1976), 385-492. In 1884, 4.3 million people (or about 10% of the population) were insured, whereas today, according to the annual reports of the German Federal Ministry of Health, more than 72 million people (or 87% of the overall population) are insured.

21. The alternative health schemes and their effects are described for Bremen in Leidinger, op. cit. (note 17). Depending on the health insurance association, the number of days of lost income that were compensated and the length of hospital stays varied and was limited.

22. See Tennstedt (1983), op. cit. (note 20); Hennock, op. cit. (note 19), 155-165. On the creation of health insurance funds in Swabia, cf. Förtsch, op. cit. (note 17), 39-48.

23. In some German states the daily rate was set up (or approved) by the government. For Prussia, see Bernd J. Wagner, '"Um die Leiden der Menschen zu lindern, bedarf es nicht eitler Pracht": Zur Finanzierung der Krankenhauspflege in Preußen', in Labisch and Spree (eds), op. cit. (note 1), 41-68. Until the 1910s, smaller surgical operations, herbal medicine, baths or dressing of wounds might have been included. See Axel C. Hüntelmann, 'Economies of the Hospital', in idem and Oliver Falk (eds), Accounting for Health. Calculation, Paperwork and Medicine, 1500-2000 (Manchester University Press, 2021), 109-42.

24. Regarding processes of accounting at the Charité Hospital in Berlin Hüntelmann, op. cit. (note 23).

25. On twentieth-century health budgets, see Christopher Sirrs, 'The Health of Nations: International Health Accounting in Historical Perspective, 1925-2011', in Hüntelmann et al. (eds), op. cit. (note 23).

26. According to Albert Guttstadt (ed.), Krankenhaus-Lexikon für das Deutsche Reich (Berlin: Georg Reimer, 1900), IV, the number of hospitals in Germany rose from 3,000 in 1876 (140,900 beds) to 6,300 in 1900 (370,000 beds). In Prussia, the number of hospital patient per 10,000 inhabitants quintupled between 1846 and 1917, see Spree, op. cit. (note 15), 76-7. For Berlin, see Manfred Stürzbecher, 'Die Berliner Krankenhäuser 1886 bis 1967', Berliner Statistik 23 (1969), 75-81.

 10.5920/PoliticalEconomy.03

27. See Albert Frank, Die geschichtliche Entwicklung der gesetzlichen Krankenversicherung (unpublished MD thesis, Technical University Munich, 1994), 38-48. Ritter, op. cit. (note 19), 54. Ritter notes that at least 50% of the population had been included by 1913.

28. Soon after the foundation of health insurance programme, all parties started to build district associations to improve their negotiating position. On such efforts in Swabia, see Förtsch, op. cit. (note 17), 78-107. On the foundation of the Hartmannbund, see Eberhard Wolff, 'Mehr als nur materielle Interessen. Die organisierte Ärzteschaft im Ersten Weltkrieg und in der Weimarer Republik 1914-1933', in Robert Jütte (ed.), Geschichte der deutschen Ärzteschaft. Organisierte Berufs- und Gesundheitspolitik im 19. und 20. Jahrhundert (Köln: Deutscher Ärzte-Verlag 1997), 97-142; Gabriele Moser, Ärzte, Gesundheitswesen + Wohlfahrtsstaat. Zur Sozialgeschichte des ärztlichen Berufsstandes in Kaiserreich und Weimarer Republik (Freiburg: Centaurus 2011).

29. See also the published rates in Walter Albrand, Die Kostordnung an Heil- und Pflege-Anstalten. Zum Gebrauch für Ärzte, Verwaltungsbeamte etc. (Leipzig: H. Hartung & Sohn, 1903). The director of the Statistical Office in Düsseldorf discussed the need for comparative financial statistics in Otto Most, 'Städtische Krankenanstalten im Lichte vergleichender Finanzstatistik', Zeitschrift für Soziale Medizin, Säuglingsfürsorge und Krankenhauswesen sowie die übrigen Grenzgebiete der Medizin und Volkswirtschaft 5 (1910), 213-236. A fixed schedule of charges for practitioners was regulated by the state. See for instance the legal commentary on the 1924 schedule (which remained valid until the late 1940s) in Eduard Dietrich and Heinrich Schopohl (eds), Das Gebührenwesen der Ärzte und Zahnärzte. Preußische Gebührenordnung für approbierte Ärzte und Zahnärzte, Gebühren der Preußischen Medizinalbeamten, Reichsgebührenordnung für Zeugen und Sachverständige und Reichsversorgungstarif (Berlin: Richard Schoetz, 1927).

30. Cf. the dietary schedule "Beköstigungs-ordnung fur die allgemeinen Krankenanstalten der Stadt Düsseldorf 1923" and the tariffs "Aufnahmebedingungen und Kostentarif für die allgemeinen Krankenanstalten der Stadt Düsseldorf für 1923" in the Municipal Archive (Stadtarchiv StA) Düsseldorf, Dept. IV, No. 37792 and No. 37815, items 20–1.

31. See Ritter, op. cit. (note 19), 54 and table 1, 171 and Tennstedt 1976, op. cit. (note 20), 385-492.

32. See Krohne, op. cit. (note 4).

33. See the brochure in StA Düsseldorf, Dept. IV, No. 37792 and No. 37815, items 20–1.

34. See Florian Tennstedt, Soziale Selbstverwaltung. Vol. 2: Geschichte der Selbstverwaltung in der Krankenversicherung (Bonn: Verlag der Ortskrankenkassen, 1977).

35. Ironically, although the statutory health insurance programme was designed to diminish the influence of the Social Democrat Party, in fact, workers and employees, often party members, gained enormous influence.

36. For example, the number of sick-days or hospital-days were increased, the amount of daily sick-pay was increased, additional family members were insured, etc.

37. See Tennstedt 1976, op. cit. (note 20), 395-6. On health insurance funds in Swabia, see Förtsch, op. cit. (note 17), 159-67.

38. In Berlin and elsewhere in Germany, food shortages led to rioting, especially in the winter of 1917/1918. Reports on political conflicts between hospital management, physicians, left-wing workers' councils, and confessional nursing staff at the Charité in GStAPK, HA I, Rep. 76 VIII D, No. 26.

39. Inflation rates had already begun to rise during the war and increased to 40% in 1919, 239% in 1920, before finally exploding to 1,000% in 1922 and 10,000% in 1923. Inflation ended with the introduction of a new currency unit.

40. On the general problems afflicting public health care and hospitals at the time, see Detlev J.K. Peukert, Die Weimarer Republik. Krisenjahre der Klassischen Moderne (Frankfurt: Suhrkamp, 1987); Heinrich A. Winkler, Weimar 1918-1933. Die Geschichte der ersten deutschen Demokratie (Munich, C.H. Beck, 1993).

41. See the annual budgets in HUA CD Nos. 1389-95.

42. For the Charité, see the annual budget files in HUA CD Nos. 1390-8. For reports about lawsuits related to outstanding debts, see GStAPK, HA I, Rep. 76 VIII D, No. 26. And for an audit report initiated by the Prussian government in the early 1920s regarding deficit spending at the Charité, see GStAPK, HA I, Rep. 76 VIII D, No. 269.

43. Regarding ambulatories, see Tennstedt, op. cit. (note 34), 150-80.

44. Ambulatories were a source of bitter dispute between health insurance funds and medical associations, and within the medical profession between practitioners and health insurance-accredited doctors (so-called Kassenärzte). The conflicts revolved around issues like the oversupply of physicians (Ärzteschwemme), fears about lower physician pay and a so-called proletarianisation of physicians, patients' (free) choice of practitioners and hospitals, and medical associations' concerns about the 'socialisation' of health and medicine. Some of these concerns culminated in various so-called doctors' strikes, which saw practitioners refusing to accept health insurance certificates. Regarding the medical profession and the threat of out-patient facilities, see Peter Thomsen, Ärzte auf dem Weg ins 'Dritte Reich'. Studien zur Arbeitsmarktsituation, zum Selbstverständnis und zur Standespolitik der Ärzteschaft gegenüber der staatlichen Sozialversicherung während der Weimarer Republik (Husum: Matthiesen, 1996); Wolff, op. cit. (note 28); Moser, op. cit. (note 28).

45. AOK Düsseldorf to the Direction of the Municipal Hospital Düsseldorf, 7.8.1926, StAD, Dept. IV, No. 37810. On the situation of health insurance funds during the 1920s, see Walter Bogs, Die Sozialversicherung in der Weimarer Demokratie (München: J. Schweitzer, 1981).

46. Regarding discussions about rising expenditure, see Krohne, op. cit. (note 4). For

comparisons of the daily catering and cure rates of hospitals, see the correspondence about cost structures between the municipality of Breslau (now Wroclaw) and the Düsseldorf Municipal Hospital in 1926, and in general various tables comparing the daily rates of larger hospitals in Germany in the 1920s in StAD, Dept. IV, No. 37815. For published comparisons, see for instance 'Kurkosten-Tarife deutscher Großstädte', Zeitschrift für Krankenanstalten 21 (1925), Issue 2.

47. There is nearly no literature on private clinics in Germany. For Berlin, see Manfred Stürzbecher, 'Zur Geschichte der privaten Krankenanstalten in Berlin', Berliner Ärzteblatt 82 (1969), 114-27.

48. According to Franz Memelsdorff, 'Die Finanzgebarung der Krankenanstalten', in Julius Grober (ed.), Das Deutsche Krankenhaus. Handbuch für Bau, Einrichtung und Betrieb der Krankenanstalten, 3rd edn (Jena: Gustav Fischer, 1932), 866-905, especially 892-3, before the First World War 40% were insured, 30% were direct payers, and 30% had their expenses covered by welfare agencies. At the end of the 1920s, hospitals in Berlin received 57% of their income from health insurance funds, 6% from direct payers, and 37% from welfare agencies. After 1930, some of the funding from welfare agencies was assumed by health insurance funds.

49. The Law for the Restoration of the Professional Civil Service in April 1933 led to the dismissal and retirement of civil servants (including medical officials) who were of non-Aryan descent or who did not share the Nazi's political views. Several by-laws limited the ability of lawyers or physicians to hold public or semi-public positions or to be health insurance employees or contractors. On these issues, see Martin Rüther, 'Ärztliches Standeswesen im Nationalsozialismus 1933-1945', in Jütte (ed.), op. cit. (note 28), 143-193, esp. 148. Staff in local health insurance offices were especially prone to be dismissed for political reasons, and on average some 30% were in fact dismissed. See Tennstedt 1976, op. cit., 405-6.

50. To this day, health maintenance organisations are banned from the health care market in Germany. See Fleßa, op. cit. (note 8), 132.

51. See Rüther, op. cit. (note 49). Regarding the ban of Jewish physicians, see Stephan Leibfried and Florian Tennstedt (eds), Berufsverbote und Sozialpolitik 1933. Die Auswirkungen der nationalsozialistischen Machtergreifung auf die Krankenkassenverwaltung und die Kassenärzte. Analyse, Materialien zu Angriff und Selbsthilfe, Erinnerungen (Bremen: Bremen University, 1980); idem, 'Health-Insurance Policy and Berufsverbote in the Nazi Takeover', in Donald W. Light and Alexander Schuller (eds), Political Values and Health Care: The German Experience (Cambridge: MIT Press, 1986), 127-84. At the same time, the autonomous self-governance of health insurance funds was dissolved. Committee members of the funds were no longer elected by members but appointed by the government; and the district and national associations were placed under state control. See Tennstedt, op. cit. (note 34), 150-80.

52. See Fleßa, op. cit. (note 8), 132.

53. The centralisation of insurance fund payments and the exclusion of private payments

effectively excluded Jewish physicians as well as patients from general hospitals. See Leibfried and Tennstedt (eds), op. cit. (note 51) and Rüther, op. cit. (note 49).

54. The central planning of hospital beds needs also to be interpreted in the context of the NS-government's preparations for war. As discussed below, hospital and other health care institutions placed a premium on the reduction of costs. One effect was that, for mental asylum patients unable to work, food ratios were (wilfully or otherwise) calculated far below minimum sustainable levels, thus condemning patients to death by starvation.

55. For an overview, see Stefan Kirchberger, 'Public-Health Policy in Germany, 1945-1949: Continuity and a New Beginning', in Donald W. Light and Alexander Schuller (eds.), Political Values and Health Care: The German Experience (Cambridge: MIT Press, 1986), 185-238; and Christoph Sachße and Florian Tennstedt, Geschichte der Armenfürsorge in Deutschland. Vol. 4: Fürsorge und Wohlfahrtspflege in der Nachkriegszeit 1945-1953 (Stuttgart: W. Kohlhammer, 2012).

56. See the Anordnung über Preisbildung und Preisüberwachung nach der Währungsreform, 25 June 1948, Gesetzblatt der Verwaltung des Vereinigten Wirtschaftsgebietes, 61. And on the decree revoking it, PR 140/48 dated 18 December 1948, see Marie-Theres Starke, Die Finanzierung der Krankenhausleistungen als Sozial- und Ordnungspolitisches Problem. Untersuchung über die Auswirkungen eines Übergangs zu Kostendeckenden Pflegesätzen im Krankenhauswesen der Bundesrepublik Deutschland (Münster: Aschendorffsche Verlagsbuchhandlung, 1962), 28. The proportional distribution of hospitals regarding their ownership in the Eastern parts of post-war Germany in W. Grossmann and H. Richau, Zur Ökonomik des staatlichen Gesundheitswesens in der Deutschen Demokratischen Republik (Berlin: VEB Verlag Volk und Gesundheit, 1962), 12.

57. Bundespflegesatz-Verordnung resp. Verordnung über Pflegesätze von Krankenanstalten, 31 August 1954, enforced 9 September 1954.

58. See Starke, op. cit. (note 56), 44. Michael Simon, Krankenhauspolitik in der Bundesrepublik Deutschland. Historische Entwicklung und Probleme der politischen Steuerung stationärer Krankenversorgung (Opladen: Westdeutscher Verlag, 2000), 41-57. Joachim Wiemeyer, Krankenhausfinanzierung und Krankenhausplanung in der Bundesrepublik Deutschland (Berlin: Duncker & Humblot, 1984), 19, has remarked that the proportion of hospital expenses in relation to the total amount spent by health insurance funds decreased from 19.23% in 1950 to 16.48% in 1960.

59. See Starke, op. cit. (note 56), 45-6.

60. See Starke, op. cit. (note 56), 22-3, 28. In the nineteenth century, publications dealt mainly with the construction of hospitals. From its first edition in 1910, the compendium Das deutsche Krankenhaus contained large chapters on the construction and funding of new buildings, in addition to chapters on hospital finance in general. This tradition continued in manuals on hospital economics published in the 1960s, for instance the standard reference (published in various

10.5920/PoliticalEconomy.03

editions and still in print) of Siegfried Eichhorn, Krankenhausbetriebslehre. Theorie und Praxis des Krankenhausbetriebes, 2 vols., (Stuttgart: W. Kohlhammer, 1967 and 1971). Two chapters deal with bed capacity planning, funding and construction of buildings (altogether 21-158), and two separate chapters deal with accounting and hospital finance.

61. The public discussion is summarised by Wiemeyer, op. cit. (note 58), 21-4.

62. Starke's work, op. cit. (note 56), contributed to this discussion. She suggested budgeting for building maintenance and raising health insurance contributions. The reform of hospital funding was only one of various other issues in discussions about the reform of statutory health insurance. See Ursula Reucher, Reformen und Reformversuche in der gesetzlichen Krankenversicherung (1956-1965). Ein Beitrag zur Geschichte bundesdeutscher Sozialpolitik (Düsseldorf: Droste, 1999).

63. See Knieps and Reiners, op. cit. (note 2), 79-80. Also Helmuth Jung, 'Political Values and the Regulation of Hospital Care', in Donald W. Light and Alexander Schuller (eds), Political Values and Health Care: The German Experience (Cambridge, MIT Press, 1986), 289-324, concludes, that "normative and financial controls [of hospital care] in the two German states were remarkably similar" (p. 289).

64. As an overview see Grossmann and Richau, op. cit. (note 56), Hartmut Rolf, Sozialversicherung oder staatlicher Gesundheitsdienst? Ökonomischer Effizienzvergleich der Gesundheitssicherungssysteme der Bundesrepublik Deutschland und der Deutschen Demokratischen Republik (Berlin: Duncker & Humblot, 1975); Herbert Mrotzeck and Herbert Püschel, Krankenversicherung und Alterssicherung (Opladen: Leske + Budrich, 1997), part A; and Alfred Keck (ed.), Planung und Ökonomie des Gesundheitswesens (Berlin: Verlag Die Wirtschaft, 1981); on petitions as a form of protest and a way to deal with deficient medical supply in the East German health sector see Florian Bruns, 'Krankheit, Kon-flikte und Versorgungsmängel. Patienten und ihre Eingaben im letzten Jahrzehnt der DDR', Medizinhistorisches Journal 47 (2012), 335-367.

65. On the call for a reform of hospital funding, Knieps and Reiners, op. cit. (note 2), 79.

66. Estimates of the deficit varied depending on the mode of calculation. See Wiemeyer, op. cit. (note 58), 20-1 and Albert Holler, 'Das Finanzierungssystem nach dem Krankenhausfinanzierungsgesetz (KHG) und Fragen der Versorgungseffizienz', in Christian Ferber et al. (eds), Kosten und Effizienz im Gesundheitswesen. Gedenkschrift für Ulrich Geißler (Muinch: R. Oldenbourg, 1985), 153-166, 158. In total, expenditure on hospitals added up to some eight billion marks in 1969.

67. Holler, op. cit. (note 66).

68. For an overview, see Axel Schildt, Die Sozialgeschichte der Bundesrepublik bis 1989/90 (Munich: R. Oldenbourg, 2007); idem and Detlef Siegfried, Deutsche Kul-

turgeschichte: Die Bundesrepublik – 1945 bis zur Gegenwart (Munich: Hanser, 2009); Eckart Conze, Die Suche nach Sicherheit. Eine Geschichte der Bundesrepublik Deutschland von 1949 bis in die Gegenwart (Munich: Siedler, 2009).

69. See Schildt, op. cit. (note 68); idem and Siegfried, op. cit. (note 68); Conze, op. cit. (note 68).

70. See Holler, op. cit. (note 66), 159.

71. See Knieps and Reiners, op. cit. (note 2), 81. They note that Geißler's prognosis was distorted because he indexed expenses beginning from the relatively low baseline of 1960.

72. See Wiemeyer, op. cit. (note 58), 90-1. Thirty years later, health care was unquestionably deemed a marketable good. See Knieps and Reiners, op. cit. (note 2), 81.

73. See Wiemeyer, op. cit. (note 58), chap. II.

74. On the Krankenversicherungs-Kostendämpfungsgesetz (Medical Insurance Cost Containment Bill) of 1977 and the Kostendämpfungs-Ergänzungsgesetz and Krankenhaus-Kostendämpfungsgesetz (Supplementary Cost Control Bill and the Hospital Cost Control Bill) of 1981, see Fleßa, op. cit. (note 8), 134 and the Bundesgesetzblatt 1977, 1069 and 1981, 1568 and 1578. See also Simon, op. cit. (note 58), 89-105; Knieps and Reiners, op. cit. (note 2), 81-3.

75. See Bundesgesetzblatt I, 1716-22, §§ 6, 18.

76. See Fleßa, op. cit. (note 8), 134; Knieps and Reiners, op. cit. (note 2), 84-5; Werner Gerdelmann, 'Auswirkungen und Reform der Krankenhausfinanzierung', in Ferber et al. (eds), op. cit. (note 66), 167-184; Hubertus Müller, 'Die Neuordnung der Krankenhausfinanzierung – eine zwingende Notwendigkeit der Gesundheitspolitik', in Ferber et al. (eds), op. cit. (note 66), 185-200.

77. See Bundesgesetzblatt I 1986, 33-9, § 17. Both profits and losses remained on hospitals' books.

78. On the reforms in the 1980s Webber, op. cit. (note 2), Bode, op. cit. (note 2), and Simon, op. cit. (note 58), 106-61.

79. These laws included the 1993 Gesundheitsstrukturgesetz (Law on health structure), the 1996 Stabilitätsgesetz (Law to stabilise hospital expenditures), the 1997 Krankenhaus-Neuordnungsgesetz (Law on the Re-Organisation of hospitals), as well as two other laws implemented in 1998 and 1999 by the new Social Democratic and Green Party coalition dealing with the stabilisation of hospital expenditures. See Fleßa, op. cit. (note 8), 133-5.

80. On the structural reforms in the 1990s, see Martin Pfaff and Dietmar Wassener, Das Krankenhaus im Gefolge des Gesundheits-Struktur-Gesetzes 1993. Finanzierung, Leistungsgeschehen, Vernetzung (Baden-Baden: Nomos, 1995); Knieps and Reiners, op. cit. (note 2), 231-6; Simon, op. cit. (note 58), chapter 4-6; Manfred Wiehl, 'Finanzie-rungsformen und Investionsrechnung im Krankenhaus', in Dietrich Bihr et al. (eds), Handbuch der Krank-

 10.5920/PoliticalEconomy.03

enhaus-Praxis. Unternehmensstrategien für Praktiker (Stuttgart: W. Kohlhammer, 2001), 289-99; Dietmar Köhrer and Maik Beltrame, 'Entgelt- und Kalkulationssysteme', in Bihr et al. (eds), op. cit., 300-22.

81. In 2016, the three biggest operator Helios (H), Asklepios (A) and Sana (S) owned 112 (H), 102 (A) and 50 (S) hospitals with an annual turnover 5.8 (H), 3.211 (A) and 2.4 (S) billion Euros, treating 5.2 (H), 2.3 (A) and 2.2 million patients per year, see https://www.praktischarzt.de/blog/ranking-groesste-klinikverbuende (15 March 2019). For the figures of total hospitals in 1991 and 2016 see the Hospital Report, edited by the Federal Ministry of Health.

82. Between 1991 and 2016 the number of hospitals declined from 2,411 to 1,951 and in the same period the number of beds decreased from 640,000 in 1991 to 498,000 in 2016. On these figures, see the Hospital Report, edited by the Federal Ministry of Health.

83. Several laws were enacted to implement case rates (Fallpauschalengesetz 2002, Krankenhausentgeltgesetz 2003, and Fallpauschalenänderungsgesetz 2006) and diagnosis related case rates (2004). Additional laws implemented structural reforms, like the Statutory Health Insurance Modernisation Law (GKV-Modernisierungsgesetz) in 2003, the Hospital Finance Reform Law (Krankenhausfinanzierungsreformgesetz) in 2009 and the Hospital Structure Law (Krankenhausstrukturgesetz) of 2016.

84. See Karl Ernst Knorr, 'GKV-Gesundheitsreformgesetz 2000', in Bihr et al. (eds), op. cit. (note 80), 113-33; Knieps and Reiners, op. cit. (note 2), 265-74; Fleßa, op. cit. (note 8), 136-67 (especially regarding diagnosis-related case rates); and Leonhard Hajen et al., Gesundheitsökonomie. Strukturen – Methoden – Praxisbeispiele, 6th edn (Stuttgart: Kohlhammer, 2011), 173-214 and 286-348.

85. Cf. Frevert, op. cit. (note 17).