

General hospitals in financial distress

Reconsidering government intervention

CPB Background Document

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Preface

The Dutch government is currently engaged in reconsidering its role in hospital bankruptcies. Even though the continuity of health care is considered as an important public goal, it is acknowledged that government support creates substantial inefficiencies in bankruptcy procedures. Therefore, the government is currently discussing several relating dossiers. One considers the above mentioned continuity of health care and the potential role of the government in it. A second dossier is about releasing the non-profit constraint of hospitals. Finally, the government has been constantly reconsidering the financing of hospitals and medical specialists. In this document, we reflect on these documents and evaluate the suggested policy measures from the perspective of (optimal) hospital bankruptcies.

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1 Introduction

In the Netherlands, private not-for profit (NFP) organizations have a long history in providing public services. Probably the most important sector in this respect is the hospital market, where only academic hospitals are public organizations. This however does not mean that central and local governments abstain from any public intervention. Quite the reverse, hospital care is heavily regulated in order to meet the policy goals of accessible and affordable health care of a high quality. Consequently, the institutional background, the financing of hospitals and insurers, and Diagnosis Related Groups (DRGs)¹ tariffs are still largely determined by the government. Moreover, in recent years central and local governments have intervened when hospitals faced financial distress because the continuity of care is considered as a relevant public goal. Although, no hospital liquidation has occurred since 1993, recently several hospitals have reported financial problems, for instance IJsselmeerziekenhuizen, Slotervaartziekenhuis, and Orbis Medisch en Zorgconcern. These hospitals continued to operate because the government intervened either by guaranteeing creditors' claims or providing direct financial support. Intervention has made informal workouts possible and therefore, prevented hospitals from filing for bankruptcy.

A recent development with respect to hospital bankruptcies is that the government intends to abstain from intervening directly and before a formal procedure has been filed (VWS 2011a). The idea is that primarily private parties, such as creditors and insurers, should prevent hospitals from getting into financial problems. Similarly, private parties should decide on the continuation, reorganization, or liquidation of a hospital, and not anticipate and exploit the option of a public bailout. This policy change essentially raises two sets of questions. First, what are the costs that come with bailouts and whether and when is it indeed optimal for the government to abstain from direct intervention? Second, how will the hospital market evolve when the government abstains from public intervention? Are hospitals similar to most firms or are there reasons – other than government intervention – to believe that incentives and bankruptcy outcomes are systematically different from other markets? If so, what does this imply for the likelihood of financial problems, and the settlement of claims of hospitals' capital suppliers?

In this paper, we address these research questions. In doing this, we essentially combine two strands of literature. First, there is an extensive theoretical literature on bankruptcies that primarily focuses on for-profit organizations. Second, there is a broad, mostly applied literature, that addresses the unique governance of hospitals, see e.g., Ecorys (2010) for a recent study for the Netherlands. Our document contributes to the current literature in providing an analysis that applies bankruptcy theory for the case of hospitals in financial distress, particularly in the Netherlands. In addition, we provide a deeper analysis of a specific segment of hospitals' governance structure, that is, bankruptcy procedures. Finally, we reflect on the current political discussion on the role of government in the case of hospital bankruptcies.

In what follows, in Section 2, we first set the stage by explaining the general principles of bankruptcy theory. In assessing the efficiency of bankruptcies, we particularly rely on Hart (2000). We consider ex ante effects as the incentives of stakeholders to avoid financial problems or – in a broader context – to optimize financial results. In addition, we evaluate ex post costs that may lower the hospital's asset value, e.g., long bankruptcy procedures, and whether stakeholders opt for too early or too late liquidation. Based on Boot and Ligterink

¹ The Dutch version of the DRG is called DBC, Diagnosis and Treatment Combination.

(2000a), we then present how bankruptcy procedures are set up in practice. We also identify the characteristics, primarily the presence of various stakeholders of the Dutch hospital market that make bankruptcy procedures potentially different from other markets. Borrowing concepts from Hoek (2007), we distinguish three layers of governance: central and local governments (public governance), creditors, including insurance companies, and the management (private governance), and medical specialists (professional governance).

In Section 3, we narrow our focus to the Dutch hospital market by discussing its institutional background, why credit risk may increase in the near future, and the incidence and causes of financial problems. In doing so, we rely on different sources of information: governmental documents on regulation, the applied literature on hospitals, and casual and empirical evidences on bankruptcies in the Netherlands, Germany, and the US.

In the following sections, we apply Hart's theoretical framework to the current Dutch hospital market. First, in Section 4, we review the potential costs of public intervention. Based on the soft-budget constraint syndrome defined by Kornai et al. (2003), we show that the anticipation of government support reduces the financial incentives of the management and the monitoring effort of creditors, and shifts stakeholders' preferences to continuity even in cases when bankruptcy would be more efficient. These costs underlie the importance of a non-intervention regime of central and local governments.

Next, we assume a world where there is no government intervention and analyze whether other characteristics of the Dutch hospital market create additional efficiency losses of bankruptcies (Sections 5 and 6). We find two components of hospitals' governance structure that influence the efficiency of bankruptcy procedures. In Section 5, we elaborate on private governance and the role of hospitals' non-distribution constraint. In Section 6, we analyze the effect of professional governance and the financial and other incentives of partnerships of self-employed medical specialists on efficiency. First, we find that in the case of financial problems, attracting private capital is difficult because of the non-distribution constraint and creditors carry downside risks completely, so that they are willing to invest only at higher interest rates. Therefore, finding a private solution for bailouts has a low probability. Second, due to a coordination problem, it will be difficult and more expensive to reach an agreement with self-employed medical specialists during an informal reorganization. For both reasons, the asset value of hospitals may become lower and the likelihood of liquidation increases.

Based on these findings, we draw several policy options in Section 7. Reflecting back to the first research question, we suggest that a non-intervention regime is necessary. Even though non-intervention preserves private stakeholders' financial incentives, this regime can only work efficiently if the government can credibly commit to it. Credible commitment may, however, be difficult: since private stakeholders carry the total cost of financial problems, a private solution may not be available and then the government still needs to intervene. And this leads to the second research question. We argue that the government can better achieve credible commitment by complementary regulatory measures that eliminate the additional inefficiencies from the other layers of hospitals' governance. We suggest that market dynamics could be increased by allowing private investments for which the non-distribution constraint does not apply. This may create room for private organizations to take over hospitals in financial distress and it may simultaneously lower entry barriers. Furthermore, the financial incentives of medical specialists need to be aligned to hospitals' incentives, for which hospitals can take the initiative. However, the government can also play a role in this context.

2 Bankruptcy theory²

Setting the stage

In this section, we present the basic dilemmas that organizations in financial distress are faced with. Next, we compare the general case with the specific case of hospitals in the Netherlands. In the standard setting, the key roles in the private governance of firms are featured by creditors, shareholders and the management of organizations. Bankruptcies and reorganizations can then be considered as the outcomes of the behavior of these parties. In the literature, the starting point of the analysis is that debtors are interpreted as both the management and the shareholders, assuming that their interests are similar. Next, the question is how these players interact, and whether bankruptcies or bankruptcy outcomes – which may be inefficient – call for any intervening role of the government.

Debtors and creditors conclude contracts to provide funds for firms. At the same time, the debtor tries to guarantee the repayment of the loan by defining control rights over (some of) the firm's assets – that is, in times of financial distress the creditor may file a claim to liquidate and sell their collateral, or reorganize. Even though *ex ante* both players are interested in the firm's long-run profitability, *ex post* – i.e., when financial distress occurs – the incentives of creditors and debtors are not aligned. In particular, their interests do conflict as it comes to the decision to liquidate or reorganize the firm. From the perspective of creditors, filing for a bankruptcy at an early stage may safeguard their assets as they have priority of claims. Debtors however have an interest in delaying this decision to prevent their jobs and equity from being lost completely. This is because they gain disproportionately when risky projects succeed (i.e., the 'upside risk'), whereas losses are limited if risky projects fail (i.e., the 'downside risk').

In the case of financial contracts, asymmetric or incomplete information on the nature and the size of financial distress enlarges these conflicting interests. First, the management has incentives to divert cash to itself and default strategically. In this case, neither the shareholders nor the creditors are able to observe whether default occurred due to true financial difficulties or not. Second, even if creditors, shareholders, and the management share similar information on the financial conditions of the firm, many aspects relating to the contract (e.g., profits, liquidation asset value) may not be verifiable by outside players, such as courts. In this respect, financial contracts can thus be considered as incomplete contracts (Aghion and Bolton 1992).

Given the existence of incomplete information, bankruptcy procedures essentially are financial contracts that aim to balance the interests of creditors and debtors, namely by formalizing what will happen when there is financial distress. They determine the control rights, i.e., the disposition of the debtor's assets and the room for reorganization. Still, bankruptcy procedures remain inherently incomplete, because at the time of financial distress not all possible circumstances and appropriate actions can be fully described and valued.

Bankruptcy principles

Although bankruptcy procedures are primarily designed to balance the interests of debtors and creditors, this does not imply that such procedures are 'zero sum games'. As Hart (2000) argues, three basic principles should be addressed in order to maximize the total interest of debtors and creditors: *ex ante* efficiency, *ex*

² In this section, the key insights from the literature on bankruptcies are obtained from Boot and Ligterink (2000a), Hart (2000), Shleifer and Vishny (1997), Tirole (2006), and White (2007).

post efficiency, and the Absolute Priority Rule (APR).³ The general idea of these principles is that procedures (or contracts) are needed to coordinate the actions of debtors and creditors, rather than allowing both parties to focus on their own interests.

First, debtors should have adequate ex ante incentives to prevent the firm from getting into financial distress. This means that the management should be monitored and/or somehow penalized if the firm gets into financial problems or when bankruptcy occurs. Creditors monitor the firm's performance in order to increase and safeguard the value of their claims. Banks, which are often creditors themselves, generally have the appropriate means to monitor the firm's financial performance. Shareholders outside the management may have stronger incentives to monitor the management than creditors, as they are the first to bear (most of) the downside risk of bankruptcies. This however does not mean that ex ante incentives are always higher with shareholders; the number of creditors and shareholders determines the overall impact of these incentives (Bolton and Sharfstein 1996).⁴ Next to monitoring activities, competition in the market should also discipline the firm's management, particularly when they fear the loss of their jobs and their reputation. Such incentives are important to strengthen the commitment of managers, and prevent them from taking excessive risks when initiating new investment projects or from defaulting strategically – the “gambling effect” (White 1996).

The second principle is that bankruptcy procedures should deliver ex post efficient outcomes, i.e., in the case of default, they should maximize the total asset value available to be divided among debtors and creditors.⁵ As debtors and creditors may have different and biased interests, reaching ex post efficiency by the optimal timing of reorganizations or liquidations is not obvious. Creditors may have an interest in filing for bankruptcies at an early stage, whereas shareholders and the management tend to delay this decision – the “delaying effect” (White 1996). The first implication of this is that creditors should be blocked when trying to become the first to liquidate, in order to prevent a prisoner's dilemma that decreases the total asset value to occur. At the same time, reorganizations and liquidations should not be too costly and time consuming because that may further decrease the total asset value of the firm. Finally, managers should default when they really are financially insolvent. Otherwise, bankruptcy procedures have high filtering costs of type I and type II errors. A type I error occurs when an inefficient firm gets reorganized but gets liquidated eventually, while a type II error occurs when liquidating an efficient firm.

The leading idea behind the principle of ex post efficiency is that the total asset value is maximized, so that all parties may benefit from that, irrespective of the distribution among them. In practice, determining the total asset value however is not easy, as information between players is asymmetric and contracts are incomplete. The determination of the total value of assets for different options (i.e., reorganization or sold for cash), measured at different moments in the process of bankruptcy, complicates the choice and the timing of decisions. As creditors and debtors have an interest – and the room – to bias information on these matters, it is crucial that a curator or trustee determines the asset value objectively.

³ A similar approach is presented in White (1996).

⁴ We return to this issue in Section 5, when discussing the private governance of hospital organizations.

⁵ When taking a broader perspective, one can also take into account the interests of stakeholders into the concept of ex post efficiency. In particular, one may think of the continuity of care.

The third principle relates to the distribution of the total asset value in times of bankruptcy: a good bankruptcy procedure should preserve the APR as much as possible. This means that senior creditors are to be paid first, then the junior creditors, and finally the shareholders. Although this principle apparently focuses on the ex post settlement of claims, the ex ante implications of the APR are important as well. In particular, if a reasonable return for creditors is ensured in bankruptcy states, they will be more willing to lend money at reasonable interest rates. Similarly, shareholders have strong incentives to monitor the firm when absolute priority is preserved. However, this does not mean that frictions between ex ante and ex post interests are fully absent: the APR is optimal ex ante, but there is a strong conflict of interest between creditors and debtors when there is financial distress. It then depends on the relative strength of these parties, how control rights are defined, and the objectiveness of the trustee, how much ex post efficiency will be lowered. To avoid the aforementioned gambling effects of debtors, there may be a case to reserve some asset value to shareholders too. Thus, the principle is that the APR should be preserved, but in practice some portion of the asset value should be reserved for shareholders.

As the strictness of the APR determines the balance between ex ante and ex post effects, one may well argue that the APR can be regarded as an instrument, rather than a goal in itself. In our analysis, we therefore will restrict our attention to ex ante and ex post efficiency as the two main guiding principles. Within this context, the strictness and use of the APR influences the outcomes on these two efficiency outcomes.

Government intervention

As becomes apparent from the aforementioned principles, bankruptcy procedures are essentially about balancing ex ante and ex post efficiency effects. On the one hand, the management should feel free to take risks to some extent, but should also be committed to the outcomes of its behavior. On the other hand, the interests of creditors should be safeguarded in times of financial distress, so as to attract funding at reasonable interest rates. Both parties must also be prevented from defaulting too early or delaying the bankruptcy procedure.

Under incomplete information on asset values and on the actions of the management, bankruptcy decisions are unlikely to be 'optimal' in practice. Nonetheless, the economic literature does not present a strong case for 'bankruptcy failures' that systematically harm one particular group or the bankruptcy process. Hence, from a policy perspective, the room for government intervention in this process further than offering a judicial framework seems limited. Because providing accessible, affordable, and high quality health care services is regarded as a public goal, in the case of hospitals governments may want to prevent liquidation to occur by subsidizing reorganizations. However, this is costly in itself and it interferes with two of the principles mentioned earlier: the anticipation of subsidies lowers the ex ante incentives of every stakeholder to monitor, and stakeholders may shift their preferences towards the continuity of the hospital even in the case of financially not viable organizations (see Section 4).

Bankruptcy laws and informal workouts

Even though there is no (theoretical) evidence for favoring creditors or debtors in bankruptcy procedures, countries have developed different bankruptcy laws that support one group over the other. These differences mainly mirror historical and cultural differences. Most of the European countries have bankruptcy laws that favor creditors ("hard" legislation), while the laws in the US and France are debtor-oriented ("soft" legislation; Boot and Ligterink 2000a, 2000b and White 1996). However, recently all of these systems have gone through some changes and shifted towards each other (see e.g., Bharath et al. 2010). Table 2.1

summarizes some characteristics of the two main bankruptcy systems and their effects on ex ante and ex post efficiency.

Table 2.1 Bankruptcy laws and relating ex ante and ex post efficiency

	Soft system (US, France)	Hard system (most EU incl. NL)
Characteristics	Aims at continuation effective impact of APR is limited => Reorganization has priority	Aims at lowering creditors' risks APR is maintained => Liquidation has priority
Effects on:		
...ex ante efficiency	Management has little incentive to avoid financial distress => More inefficient firm => More distress	+ Stronger commitment of management, less risky investments => More efficient firm => Less distress -/- Less dynamic efficiency
... ex post efficiency	+ Less risky behavior in times of distress + Less delay in reporting distress -/- Unjust reorganizations (type I error)	-/- Risky investments to avoid filing -/- More delays in filing -/- Unjust liquidation (type II error; unless curator takes over management)

A soft system aims at the continuation of firms. Therefore, primarily debtors file for bankruptcy protection and reorganization has a central role. Reorganization is carried out by the debtor, which implies that incentives to avoid financial problems are relatively low and ex ante costs are high. The upside of the story is, however, that gambling or delaying effects of debtors are limited in times of financial distress. As a result, the ex post costs before filing for bankruptcy are low. On the contrary, ex post costs after filing due to the filtering of type I error might be high (type II error hardly occurs). As White (1996) argues, policy makers often favor the debtor-oriented or soft system: with continuation of particularly larger firms, the current employment of workers can be protected. For this reason, reorganization plays a central role in France. Furthermore, policy makers have to face only the lower ex ante efficiency and type I errors, which are generally for the longer run or remain unnoticed even by them.

In a hard system, such as in the Netherlands, protecting creditors' claims has a priority, therefore, they are encouraged to file for bankruptcy in the first place (see textbox below). Most commonly, an outside official is appointed by the court to oversee the bankruptcy procedure. In this process, the position of the management is not guaranteed. Thus, ex ante, the management has more incentives to operate efficiently and avoid financial problems. As Acharya et al. (2011) argue the management invests less risky, implying less dynamic efficiency but also less risk-taking behavior. Ex post, creditors receive the value of their claims more easily by the sales of assets. Therefore, firms may get quickly liquidated, which increases the likelihood of type II errors. Furthermore, to avoid or delay filing for liquidation, the management may invest in risky projects that potentially deliver higher profits.

The Dutch bankruptcy legislation

Similar to most countries, firms in financial distress in the Netherlands have three options to choose from (Boot en Ligterink 2000a, EC 2007): informal reorganizations, moratoriums, and bankruptcy.

Informal reorganization or workout

Informal workouts are often the preferred form of debt restructuring when formal reorganization is expensive and takes long. By workouts, creditors can more likely preserve their claims in a soft system, while debtors can continue to operate without losing their reputation in a hard system. Because all creditors have to agree with the reorganization, workouts are more likely to occur if the creditors' debts are concentrated. Therefore, banks that are usually the main creditors (of hospitals) and able to recognize financial problems in an early stage are most likely to initiate informal reorganization.

Moratorium ('surséance')

The first level of formal bankruptcy procedures; this is comparable with Chapter 11 Reorganization in the US (US Courts, 2010). In the Netherlands, the debtor can request a moratorium when it foresees its inability to pay debts. The moratorium involves a reorganization plan that includes restructuring debts, postponing payments, or discharging some debts. The moratorium is rejected if either the creditors who own more than a quarter of total debt or more than one third of the total number of creditors vote against it. In this case, the firm goes automatically bankrupt. If the moratorium is approved, the judge appoints a supervisor who oversees the management, which stays in duty. During the moratorium, the debtor cannot be forced to pay its debts. The reorganization plan also has to be approved by minimum two-third of the creditors, which hold at least 75% of total debt. New financing gets priority in this process. Some elements of the Dutch system contrast to the US system. There, mainly debtors initiate reorganizations, and after filing, the debtors keep their possessions and control their assets during the process. The US voting rules are less stringent than in the Netherlands.

Bankruptcy ('faillissement')

The US equivalent of this procedure is Chapter 7 Liquidation. In the Netherlands, the debtor and outside parties, such as creditors, can request the liquidation of assets after the debtor has ceased to make payments. In the case of bankruptcy, the debtor's total assets are sold, and the obtained revenue is shared between creditors. The court appoints a trustee and takes the power off the management. Yet, the trustee can also decide about continuation. In the US, mainly debtors initiate filings, and after filing the firm immediately ceases operation.

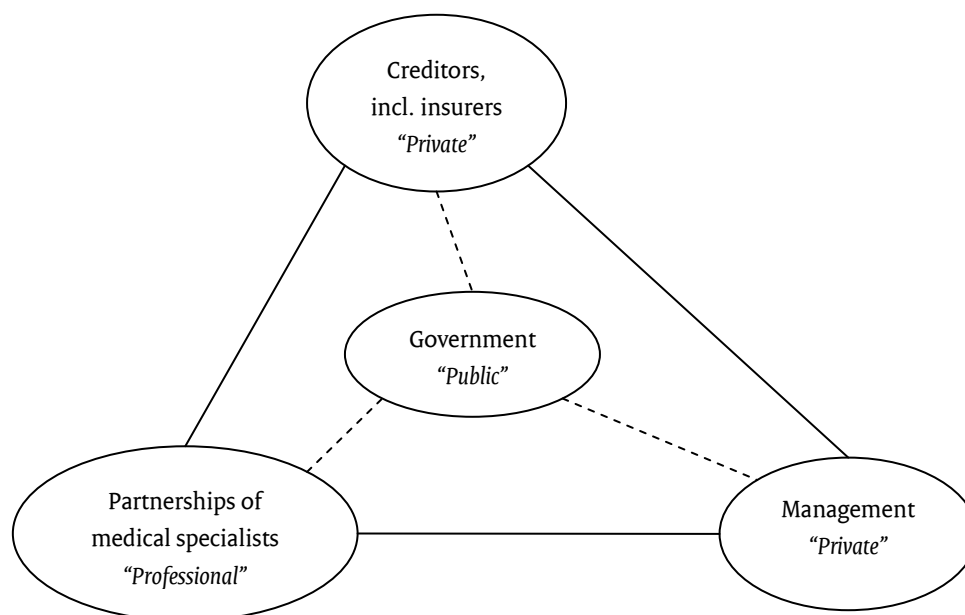
Although formal bankruptcy procedures may be soft or hard, the effective impact on the likelihood of reorganizations or liquidations is partially mitigated by the occurrence of informal workouts. Formal reorganization can be expensive and take a long time. Therefore, creditors or debtors often opt for informal workouts. Jostarndt and Sautner (2010) find in their empirical paper that half of the firms that faced financial distress in their sample decided to enter informal reorganization.⁶ They also analyze why organizations chose an informal workout instead of formal procedures. They argue that firms that have higher leverage (or less secured debts), have banks as the main creditors (i.e., concentrated claims to avoid coordination problem with creditors), and exhibit higher going concern values (i.e., the presence of non-physical assets, such as goodwill) are more likely to start a workout. The effects of informal workout on the efficiency of bankruptcy are similar to those of the soft-system. However, Jostarndt and Sautner (2010) present evidence that the likelihood of type I error might be even higher in an informal workout.

As we will discuss it in Section 3.3, Dutch hospitals in financial distress have only chosen informal reorganization. In this market, creditors' claims are concentrated and medical specialists invest in goodwill, therefore Dutch hospitals correspond to the above-mentioned conditions. However, in the hospital market, the presence of central and local governments probably plays the most important role.

Public, private and professional governance

As to the Dutch hospital market, in the recent past, local and central governments typically intervened and supported hospitals that were in financial distress (see also Section 3). As we will argue in Section 4, this role of the government substantially affects the ex ante and ex post efficiency of hospital bankruptcies. Yet, another important rationale for the current analysis is to picture a world without government intervention for hospitals in financial distress.

Figure 2.1 The current governance structure of Dutch general hospitals



⁶ They investigate 116 German firms that reported financial problems between 1997 and 2004.

Under the assumption that the government commits not to intervene, one may argue that bankruptcy procedures for hospitals should be similar to those for other private organizations. Competition among hospitals will provide sufficient ex ante incentives and discipline them in their investments and in attracting funds from shareholders and creditors. In practice, however, such a scope would be too limited, as Dutch hospitals have no shareholders, medical specialists are often not employees, and hospitals operate in a market that is highly regulated. Governance modes are, therefore, more diverse than in a conventional model and specific institutional settings affect bankruptcy procedures to a large extent. In what follows, we cluster these extensions into three categories: public governance, private governance, and professional governance of hospitals (Hoek 2007). Figure 2.1 depicts the relationship between these governance types. After characterizing them, we will examine how they affect the incentives of financial contracts, and as a result, the incidence and outcomes of bankruptcies. As such, we will analyze the extent to which governance types affect the ex ante and ex post efficiency of hospital bankruptcies.

Public governance relates to the role of government as an important stakeholder in hospital care. Essentially, the role of the government here is threefold. First, in order to safeguard public interests, the government regulates transactions in hospital care by means of, amongst others, quality inspections, public insurance coverage, and regulation of products and prices (e.g., combinations of diagnoses and treatments that are reimbursed by insurers). As such, government regulation exerts a strong influence on the profitability of hospitals. Second, because the government regularly reconsiders and often delays these regulatory measures, hospitals are faced with regulatory uncertainty – rather than with uncertainty that is inherent to competitive markets. Finally, we already indicated that (local) governments that aim to safeguard the provision of hospital services tend to intervene when hospitals are in financial distress. We will analyze this in Section 4.

General hospitals in the Netherlands have a non-profit status: by law, Dutch hospitals are not allowed to pay out dividends to shareholders. Therefore, only creditors and the management determine hospitals' private governance.⁷ This means that hospitals' assets consist of past surpluses, donations, and debt (partly subordinated loans). Due to the non-distribution-constraint, capital suppliers are only faced with (financial) downside risks, making them reluctant to fund high-risk investment projects or they would do so only at higher interest rates. The most important creditors are banks, and their claims are highly concentrated. Next to these, insurance companies that have contracted hospitals may have substantial financial interests in hospital organizations: they reimburse hospitals and provide advances for them, which makes them creditors. Insurance companies are also responsible for the provision of hospital services to their insured population; hence they are inclined to monitor the management. We will elaborate on this in Section 5.

Professional governance refers to hospitals with a dichotomy between the management and regular employees on the one hand, and self-employed medical specialists that are members of partnerships on the other hand. Compared to the standard model with a management and creditors only, this dichotomy complicates matters substantially. First, the physical capital of hospitals has little value without the scarce human capital of medical specialists, endowing them with strong negotiation power. In that respect, medical specialists can be considered as (quasi-)shareholders of human capital. Second, since medical specialists are allowed to make profits and usually do not carry the costs of hospital's inputs, they have different incentives regarding hospital costs than the management. This raises the question whether the overall incentives for the hospital to prevent bankruptcies are higher or lower than in the case with employees. In Section 6, we will address this issue.

⁷ In our analysis, we restrict our definition of private governance to creditors, shareholders and the management of firms. Obviously, patients and employees can be regarded as important (private) stakeholders too, but our focus will be on bankruptcies in particular.

3 Hospital bankruptcies: institutions, incidences, and causes

Various institutional settings, such as the organizational form, financing, and the role of medical specialists, determine the governance of general hospitals in the Netherlands. To understand how these elements influence hospitals' financial situations and the events of financial distress, in this section we present the institutional background of Dutch hospitals, the credit risk hospitals currently face, as well as some evidence of financial distress.

3.1 Institutional background

The Dutch Ministry of Health, Welfare and Sport (ministerie van Volksgezondheid, Welzijn en Sport, VWS) aims to reach the following policy goals: accessibility, affordability, and quality of health care services. Therefore, VWS is responsible for establishing the institutional framework of health care by setting several laws (see textbox).⁸ Mainly the Dutch Healthcare Authority (NZA)⁹ and the Dutch Health Care Inspectorate (IGZ) supervise these laws. In addition, when a hospital faces financial problems and accessibility is at risk, the government may intervene in order to guarantee the continuity of care. In this subsection, we describe the most relevant legislation that influences hospitals' financial situation and we discuss the currently operational policy of the Dutch government about intervention in times of financial distress. The following subsections elaborate on regulation relating to each layer of governance in more details.

Public governance

Most importantly, and as we mentioned before, the government is a regulator with the goal to increase competition and thus guarantee accessible, affordable, and high quality health care. On top of that, central and local governments intervene in the case of financial distress. According to the current practice (NZA 2010a) the Dutch government aims at guaranteeing the continuity of health care. The Health Insurance Act (Zvw) specifies that consumers should be provided with sufficient and easily accessible health care services in the whole country. Furthermore, the Care Institutions Accreditation Act (WTZi) requires that patients have to get access to emergency room services of a general hospital within 45 minutes. In the case of financial distress, the NZA is entitled to determine whether a hospital is eligible for government support. It appoints an independent committee that evaluates several conditions for intervention, for instance, how much the continuity of care might be harmed, the seriousness of financial problems, and the likelihood that the hospital management is able to overcome financial difficulties with government support. Government support can take the form of a guarantee or a loan, but also an increase in the budget or tariffs.

Private governance

According to the WTZi, general hospitals are subject to the non-profit constraint. Because of the non-profit constraint, attracting private capital is almost impossible and thus hospitals' assets are primarily financed by debt (see the Appendix for various Dutch cases).¹⁰ Banks and insurance companies provide the largest proportion of hospitals' credits. So far, the Guarantee Fund for Healthcare (Waarborgfonds voor de

⁸ Based on information available on <http://wetten.overheid.nl/>, www.nza.nl, Hoek (2007), and Jeurissen (2010).

⁹ In the case of competition issues, the NZA works in cooperation with the Dutch Competition Authority (NMa).

¹⁰ In some other countries, such as the US and Germany, private hospitals can also be investor-owned.

Zorgsector, WfZ) has guaranteed health care providers' loans, therefore hospitals could receive favorable borrowing conditions. In exchange, the WfZ requires solvency and an investment plan from the hospital and plays an important role in monitoring. Currently 76% of hospitals are linked to the WfZ.¹¹

Legislation on hospital financing

Care Institutions Accreditation Act (Wet Toelating Zorginstellingen, WTZi)

The WTZi determines under which circumstances organizations may operate in the health care market. This law indicates requirements for the management and determines the non-profit (NFP) constraint. The NFP constraint implies that attracting private equity is basically impossible. The WTZi also sets a (maximum) 45-minute norm for patients to get access to emergence rooms. Until 2008, the WTZi required hospitals to get permission for (re)building their physical facilities and at the same time guaranteed compensation for the accompanying costs of capital. The Dutch Health Care Inspectorate (Inspectie Gezondheidszorg, IGZ) is mainly responsible for enforcing the WTZi. The WTZi also lies down that in the case of bankruptcy, the Care Sector Restructuring Board (College Sanering Zorginstellingen, CSZ) supervises the liquidation process and the sale of physical facilities.

Health Insurance Act (Zorgverzekeringswet, Zvw)

According to the Zvw introduced in 2006, every resident of the Netherlands is obliged to have a private health insurance that covers health care services (verzekeringsplicht). Insurance companies are in turn obliged to accept the request of any consumer for an insurance contract that covers basic health care services provided by general practitioners, hospitals, and pharmacies (acceptatieplicht). The Dutch Healthcare Authority (Nederlandse Zorgautoriteit, NZa) supervises the Zvw.

Healthcare Market Regulation Act (Wet Marktordening Gezondheidszorg, WMG)

Since 2006, the WMG has been aiming at stimulating cost-efficiency and protecting patients by requiring transparency of offers from insurance companies and care providers. The DRGs are also defined in the WMG. The NZa, in cooperation with the Netherlands Competition Authority (de Nederlandse Mededingingsautoriteit, NMa), supervises the competition in the health care sector.

Quality Act (Kwaliteitswet Zorginstellingen, KwZ)

The 1996 KwZ obliges health care providers to monitor and improve their quality. The IGZ oversees the quality of care.

The Zvw and the Dutch Healthcare Market Regulation Act (WMG) lay down the most important rules regarding hospitals' financing in the Netherlands. Hospital care services are financed by obligatory private insurance contracts that patients have to conclude with insurance companies. The Zvw specifies that insurance companies are obliged to offer a basic insurance for any patient that requests it. This insurance cannot differentiate premiums according to consumers' characteristics, such as age, health status, etc. As a consequence, the risk each insurance company faces because of its clients' different individual risks may vary substantially among insurers. To compensate for contracting with higher-risk consumers, insurers

¹¹ See www.wfz.nl.

participate in a risk equalization scheme. Furthermore, on the purchasing side, insurance can be based on selective contracts between the insurer and health care providers, implying that patients can only get access to certain hospitals' services (see NZa 2010c).¹² This may put pressure on hospitals to compete more fiercely, but selective contracts are not allowed to harm the accessibility of health care services.

To assure cost-efficiency and so affordability of health care, the WMG lays down the financing system of general hospitals. Since 2005, insurance companies have compensated hospitals' variable costs per treatment according to Diagnosis Related Groups (DRGs).¹³ The NZa regulates the tariffs on the majority of treatments (the "A-segment"), while prices of an increasing proportion of treatments follow from negotiations between insurance companies and hospitals (the "B-segment"; 34% of total tariffs in 2009). However, this DRGs system does not mean that hospital revenues completely depend on production; the A-segment is subject to a budgeting system. The hospital needs to agree on the yearly budget with the insurers in advance. Furthermore, the government continues to partly finance investments in (new) buildings until 2012. The rest of investments is also covered by DRGs (see integrated funding in Section 3.2).

Professional governance

Even though many medical specialists in Dutch general hospitals are still self-employed, specialists switch to employed status with increasing frequency. Out of all medical specialists – that include the employed specialists of academic hospitals – in 2007, 44% of medical specialists were self-employed and 56% were employees, while this proportion was the opposite in 1999.¹⁴ Dutch medical specialists normally have an agreement with one hospital only. Self-employed medical specialists work in partnerships with other physicians within the same specialty. New entrants, usually young specialists, need to invest in a partnership by paying goodwill, which is about one year's remuneration. Medical specialists have a strong negotiating position with the hospital management. For instance, the medical staff is very influential in appointing and deposing the hospital board (Hoek 2007).

Payments for specialists are part of DRGs tariffs, which basically cover the (pre-determined standard) time spent on treatments. Currently, self-employed medical specialists receive their payments directly from insurance companies. This remuneration does not depend on negotiations between the hospital and health insurers but only on the volume of their production: the more DRGs are produced, the more money the specialist receives. The traditional system with physicians as agents who could determine what happened in the hospital, turned out to be not financially sustainable: large cost increases led to the introduction of budgeting in the Netherlands in the 1980s.¹⁵ Recently, arrangements have also been made to change the payment system for medical specialists in order to provide them with stronger incentives for cost control (see macro-budgeting in Section 3.2). Even though self-employed medical specialists are formally considered as entrepreneurs, they miss some of the risks that entrepreneurs normally run because in most cases the hospital pays the costs of support staff, equipment, and the building (NZa 2010b).

¹² So far, Dutch health insurers have only made limited use of this option. Some first examples of "Managed Care" initiatives by insurers: De Friesland Verzekeraar steers by waiving mandatory deductible (<http://www.defriesland.nl/Consumenten/service/Vragen-of-opmerkingen/veelgestelde-vragen/Zorgverzekering/Vragenoverzicht-per-rubriek/Eigen-risico/Eigen-risico.aspx>) or DSW vertically integrates with Vlietland hospital (see e.g., Baarsma et al. 2009).

¹³ In the Dutch system, it is called Diagnosis Treatment Combination (Diagnosebehandelingcombinatie, DBC).

¹⁴ We should note that differences between specialties are large (Capaciteitsorgaan 2010 p.15-16.). In 2007, less than 30% of the plastic surgeons, orthopedic surgeons, radiologists, cardiologists, and urologists were employees, but more than 90% of pediatricians, rehabilitation specialists, clinical geriatricians, and clinical geneticists. The reason for these high percentages is that these specialties are more frequently present in academic hospitals where specialists are employed.

¹⁵ For the same reason, managed care came about in the US.

3.2 Recent developments in regulation: increasing credit risks

The recent changes in the institutional background of hospitals that aim at increasing competition for the benefit of efficiency and quality (VWS 2011b) have created new challenges for hospitals. Some already mentioned elements of hospital financing, such as the introduction of DRGs, the health insurance reform aiming at more competition among insurers, and the possibility of selective contracting, directly affect hospitals' financial performance. Furthermore, there are several new changes in regulation that may increase hospitals' credit risks.¹⁶ In this section, we present these new regulatory measures linked to each governance structure.

Public governance

For some years, the Ministry of Health, Welfare and Sport, in cooperation with other ministries and the NZa, has been reconsidering the role of the government in the case of financial distress (FC 2005 and 2006, VWS 2009, NZa 2009d, and Zorgmarkt 2010a). In its recent letter to the Dutch Parliament (VWS 2011a), the government aims at abstaining from direct intervention and only guaranteeing the continuity of essential care, such as emergency rooms and acute obstetrics. In the case of financial distress if private solutions are lacking, the government establishes a non-profit rescue organization that takes over the provision of essential care. However, this happens only after bankruptcy of the provider and health insurers must demonstrate that force majeure makes it impossible for them to fulfill their duty to organize care for their enrollees. In addition, the government suggests an early warning system (EWS) that is carried out by insurance companies.

Private governance

Currently, we can observe several adjustments in hospitals' financing. The current budgeting system, which is based on DRGs, will be gradually replaced by a new system of 3,000 health care products, called the DOT (DBC's Op weg naar Transparantie).¹⁷ In the beginning of the transition, financing of hospitals and specialists will remain separated. Hospitals' yearly spending will be limited by macro-budgeting (macrobeheersing). It implies that the total volume of hospital services will be allowed to grow with a maximum rate of 2.5% per year. In addition, the excess budget will be immediately returned to insurance funds and in the end of each year, hospitals' budgets will be adjusted based on their market shares. Limiting budget growth and redistributing hospitals' budgets may erode the financial incentives of hospitals that are efficient and represent high quality. This may be especially valid for new specialized clinics (Zelfstandig Behandelcentrum, ZBC) that are counting on large growth rates in their business plans.

Furthermore, the government is about to cease funding hospitals' investments. The new regulation, which will be introduced in 2012, specifies that hospitals' capital costs have to be covered by DRGs (integrated funding system; integrale bekostiging). Since 2008, in the transitory period, the NZa has been extending the group of treatments that have to be included in integrated funding every year. Treatments in the B-segment are already covered by DRGs. This new regulation implies that hospitals need a sufficient amount of treatments to cover investment costs. Currently, 13% of total hospital costs relate to capital and these costs increase somewhat more than total costs (NVZ 2010). As a consequence, hospitals that do not have sufficient utilization (e.g., large hospitals with excess capacity or small hospitals with low capacity) might face financial

¹⁶ In this study, we focus on the most important characteristics of the hospital market that influence credit risks. It would certainly be beneficial to estimate the magnitude of credit risks. However, this quantification is beyond the scope of this research.

¹⁷ Several elements of new hospital financing are still under the consideration of the NZa. See also VWS (2011b).

difficulties. The Dutch Hospitals Association provides some evidence for that by regarding 10 hospitals (approximately 10% of total) as facing a high risk of bankruptcy because of the new regulation about integrated funding (Volkskrant 2010, FD 2010a). To reduce financial pressure, large hospitals may close divisions and small hospitals may specialize or merge with other hospitals to increase economies of scale.¹⁸

Finally, there is a recent concern that hospitals may get bank loans under worse conditions due to Basel III (FD 2011). However, a slow transition until 2019 allows banks and hospitals to adjust to this new measure (Bijlsma and Zwart 2010).

Professional governance

As mentioned before, medical specialists currently do not have (direct) financial incentives to control hospitals' costs. Instead, they probably prefer a high level of production, more facilities from the hospital to assist their work, better quality equipment and drugs, and higher employee hours. Therefore, to safeguard affordability, the government needs to aim at regulatory measures that help better align hospitals' and specialists' financial incentives.

As from 2015, the payment of medical specialists will be part of the integrated funding system and their total budget will be part of hospitals' budgets. DRGs will continue to determine the payment of medical specialists in both segments. The standard time that medical specialists spend on a specific DRG will be recalibrated and the hourly wage will be freely negotiable.

In the transitory phase between 2012 and 2014, specialists will formally remain entrepreneurs (Onderhandelingsresultaat 2010, NZa 2011). Similarly to the hospital, macro-budgeting will also apply to their financing: the NZa limits the total revenue medical specialists can earn.¹⁹ The hospital will first make these revenues available to the collective of medical specialists and then specialists have to negotiate with the management how the total budget will be shared. The remuneration for individual specialists will be influenced to a far lesser extent by production changes. 75% to 85% of the medical specialist budget will be fixed and accompanied by agreements on production. 15% to 25% will be variable and depend on specific performance, for example regarding quality, innovation, production volume, and education. Within these ranges, the exact percentages will be negotiated between the hospital's management and medical specialists. Thus, incentives for specialists to produce will be weaker already in the transition.

3.3 Incidence of hospitals in financial distress

Cases in the Netherlands

Until recently, only few Dutch hospitals faced financial distress and no hospital has been liquidated since 1993, when a small general hospital went bankrupt (Medisch Centrum Berg en Bosch in Bilthoven). Similarly to other markets, bad management was mentioned in the media as one of the most important reasons for that. To some extent also due to the increasing credit risk relating to institutional changes, several hospitals reported financial difficulties in the last few years (see Table 3.1 and cases in the Appendix). Overcapacity, competition, and expensive housing created financial problems for the Slotervaartziekenhuis (Amsterdam), which was finally taken over by an investment company in 2007. The IJsselmeerziekenhuizen (Flevoland) had

¹⁸ An alternative that very rarely occurs is that a hospital issues bonds to cover investment costs. The only example we are aware of is the MC Groep, the company that bailed out the IJsselmeerziekenhuizen (Zorgvisie 2010).

¹⁹ It is currently unclear what the upper limit of their budget growth will be.

to be bailed out by a professional investor and the central government in 2009. The initial causes of financial distress were a combination of quality problems, bad management, and conflicts with medical specialists. And to mention a last example, in 2009, the newly opened Orbis Medisch en Zorgcentrum (Orbis MZ; Sittard-Geleen) reported financial problems because of too optimistic investments and insufficient utilization, and therefore received additional bank loans with a state guarantee.

Table 3.1 General hospitals in financial distress: reasons and remedies²⁰

Hospital	Reasons for financial distress	Year of workout	External remedies	Internal remedies
Slotervaartziekenhuis (Amsterdam)	Overcapacity and strong local competition	2007	- Meromi Holding BV took it over for 26m euro and it is now an investor-owned hospital	- New management - Renegotiated contracts with creditors - Positive result as of 2007
IJsselmeerziekenhuizen (Lelystad, Emmeloord)	Inadequate management and quality	2009	- MC Group took them over for 15m euro and provided 5m euro subordinated loan - NZa granted 18m euro government support in 3 phases - Municipalities and VWS gave 10m and 14.5m euro subordinated loans	- New management and supervisory board - Partnerships with other hospitals - Reduction of medical staff and number of creditors - Positive result as of 2009
Orbis MZ (Sittard-Geleen)	Overinvestment in capacity and quality	2009	- Mortgage of ABN Amro and Deutsche Bank for 100m euro each with municipality guarantee	- New management - Extensive discharge in medical staff - Still faces deficits

In all of these cases, informal reorganization was the remedy to financial problems. Furthermore, all of these hospitals received the financial support from central or local governments, in addition to either additional bank loans or private investments. In some cases, the government intervened indirectly by providing guarantees for the creditors or approving a relatively low sales value of previously publicly owned real estate, or provided direct financial support (see Table 3.2).

²⁰ For more details see Appendix.

Table 3.2 Financial support of central and local governments between 2000 and 2010²¹

Year	Hospital	Level of intervention	Support	Amount of direct or form of indirect intervention
2003	Leyenburg Ziekenhuis	central	direct	€0,7m
2004	Gemini Ziekenhuis	central	direct	€2,1m
	Gelderse Vallei	central	direct	€7,3m
2009	IJsselmeerziekenhuizen	central	direct	€18,0m
		central	subordinated loan	€14,5m
		local	subordinated loan	€4,0m
	Orbis MZ	local	indirect	guarantee

Evidence for bankruptcy in the US

As hospitals still rarely face financial distress in the Netherlands, we rely on the somewhat more extensive US literature in order to better understand the reasons for and the remedies of hospital bankruptcies. To find links between these countries, we first briefly present some characteristics of the US market relating to each of the three governance modes.

The government in the US has in some aspect a similar role as in the Netherlands but in other aspects it is different. First, and similar to the Netherlands, the government intervenes in the case of financial distress only if it relates to essential health care. Regarding hospital financing, federal and state governments have a somewhat different role. The federal government covers the total costs of hospital treatments for elderly (14% of insured population in 2008) based on DRGs under the Medicare system.^{22 23} At the state level, lower income groups (14% of insured population in 2008) are reimbursed via Medicaid programs. In some states, providers are paid directly on a fee-for-service basis, while in other states they are paid via managed care programs.²⁴ Even though 66% of the insured population has private insurance, most of hospital costs relate to Medicare and Medicaid treatments. For Medicare and Medicaid programs, a budgeting system applies: tariffs relating to their patients' treatments decrease every year. Finally, local governments have so far limited the number of hospitals by issuing Certificates of Need. However, due to liberalization, licensing is almost completely abolished.

Regarding private governance, US hospitals have a mixed ownership structure. In 2009, 20% of a total of 5000 hospitals were public, 20% were investor-owned, and 60% were non-profit organizations.²⁵

Finally, most of the medical specialists were self-employed in the past, as in the Netherlands (Berenson et al. 2007 and Casalino et al. 2008). However, due to changes in regulation, competition, and technological developments, medical specialists have become more inclined to stabilize their financial situation. Some of

²¹ NZa 2009a, Orbis Medisch en Zorgconcern 2009, IJsselmeerziekenhuizen 2010

²² <http://www.cms.gov/default.asp?>

²³ See also the American Hospital Association (AHA): www.aha.com.

²⁴ A managed care plan has contracts with physicians, hospitals, and other health care providers. It can take three main forms: health maintenance organization (HMO), preferred provider organization (PPO), and point of service (POS). Source: Wikipedia.

²⁵ Data from the AHA.

them strengthened their links to hospitals either by becoming employees or by forming joint ventures. At the same time, some specialists financially separated from hospitals, for instance by competing through their self-owned private clinics (a similar organization form as ZBCs in the Netherlands).

In the US, hospitals commonly file for formal bankruptcy protection, and most of the filing organizations cease operation.²⁶ Landry et al. (2009), who analyzed 42 representative hospitals that filed for bankruptcy between 2000 and 2006, found that the reasons for financial problems were essentially not different from the reasons in other industries. Several causes relate to the internal organization of hospitals: poor financial management, bad financial strategies, physicians' politics, and quality concerns. In comparison to other hospitals, those that are smaller than their competitors are more prone to financial problems because they have a weaker position in managed care and their fixed costs have to be covered by DRGs (as in the case of integrated funding system in the Netherlands). For similar reasons, hospitals that are not part of hospital systems filed more often for bankruptcy protection. Finally, investor-owned hospitals are more likely to report financial distress than non-profit organizations.²⁷ Landry et al. (2009) argue that these hospitals usually take more risks, but also often file for bankruptcy for strategic reasons (i.e., strategic default). Furthermore, several external effects contributed to financial problems, such as an unfavorable payer mix (i.e., a large share of Medicare and Medicaid programs), demography, and politics.

Bazzoli and Cleverly (1994) show that the financial distress of surviving hospitals was most commonly resolved by a successful reorganization and acquiring private investments. Government intervention rarely occurs. The main reason is that the supply of hospital care is sufficient in the US. Therefore closing (a few) financially not viable hospitals may not hinder essential care in the region. The government may decide to intervene, if accessibility is in danger due to financial problems. Also, in the US, public goals may be less stringent than in the Netherlands, and thus the government in general plays a less active role.

Conclusion

Some lessons can be drawn from the recent evidence in the Netherlands and the US. In the Netherlands, hospitals still rarely face financial distress. However, due to the recent development of regulated competition, hospitals may face higher credit risks in the near future. Even though informal reorganization may be expected in both countries due to the expensiveness of formal bankruptcy procedures, we observe that informal reorganization occurs more frequently in the Netherlands than in the US. We will discuss the potential reasons for that – such as government intervention, concentrated claims of creditors, and the presence of non-physical capital – in the coming sections. The internal causes of bankruptcy are similar in both countries, and most commonly relate to inadequate management, physicians' politics, and quality problems. We can, however, observe differences regarding external reasons that are mainly due to the different financing systems in these countries. The principles about the role of the government in the case of financial distress are similar in these countries. Yet essential care is less likely to be harmed in the US mainly because of historical reasons, and also because the supply of hospital care is more extensive there than in the Netherlands.

²⁶ Between 1980 and 1990, 10% of community hospitals (approximately 550 hospitals) were closed (Bazzoli and Cleverly 1994). Landry et al. (2009) found that 67% of filing hospitals ceased operating until 2006.

²⁷ Nonetheless, they found that differences in ownership did not influence whether a hospital closed or continued to operate.

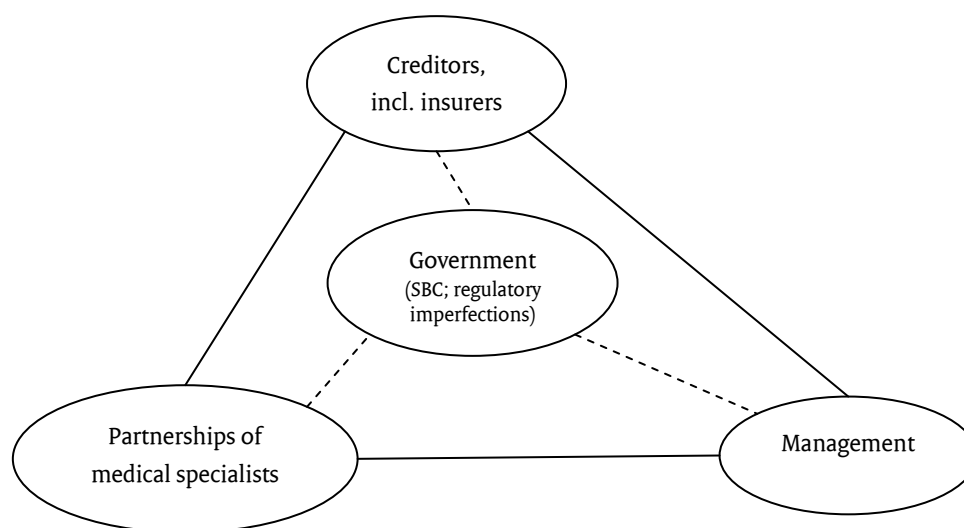
4 Public governance

As discussed in the previous section, the government plays a crucial role in the hospital market. Several Dutch general hospitals have faced financial problems recently and central and local governments intervened by directly bailing them out or providing guarantees. Furthermore, as we discussed in Section 3.2, hospitals may face higher credit risks in the near future due to the new developments of regulated competition. The question in this section is how the anticipation of government bailouts and changes in regulation may influence hospitals' financial incentives. Therefore, we start our analysis by taking the current situation of the Dutch general hospital market as a status quo. First we describe the role of the government and then evaluate how public governance affects the ex ante and ex post efficiency of bankruptcies, and whether the government can improve upon that.

Characterization of public governance

As we discussed in the previous section, the Dutch government aims at safeguarding public interests. One of the goals in regulating health care is to increase competition in order to safeguard accessibility, quality, and affordability (see Section 3.1). Several relating institutions, for instance obligations for citizens to buy health insurance and for insurers to accept citizens without risk selection, provide a stable background for hospitals' operation. However, the government may also influence hospitals' financial position at two additional layers.

Figure 4.1 Government in hospitals' governance structure



First, hospitals need to take into account potential regulatory imperfections. For instance, regulation has to take the trade-off between public interests into consideration. Therefore, not every regulatory measure is perfectly aligned with the initial goal of increasing competition. New regulatory measures, such as restricting cost increases for hospitals to safeguard affordability at the macro level and redistributing excess budgets afterwards (i.e., macro-budgeting), may limit the growth and the market share of financially viable and good quality hospitals. Other changes in regulation, such as the integrated funding of investments or limited cost-increases for medical specialists, may also increase hospitals' credit risks (see also Section 3.2). Furthermore,

according to Joskow (2010), the government can create uncertainty, for instance, by delaying the introduction of new regulation or by reconsidering the current financing system of firms.

Second, central and local governments currently also tend to intervene if hospitals are in financial distress. According to the current practice of the Dutch government (NZa 2010a), which is at the moment under reconsideration (VWS 2011a), the NZa is entitled to determine whether a hospital is eligible for government support. Its decision is based on an independent evaluation of how much liquidation may harm the continuity of care and the likelihood that the hospital's management is able to overcome financial difficulties with government support. Government support can be a guarantee, a loan, and an increase in the budget or in tariffs. All cases presented in Section 3.3 and the Appendix show some forms of intervention.

Ex ante efficiency

We can determine the efficiency of bankruptcy procedures by analyzing how private stakeholders of the hospital market react to public governance in their financial decisions. Starting from the second role of the government, that is intervention, every stakeholder is likely to anticipate government support and may therefore exert less effort to increase the hospital's financial performance. This argument resembles the soft budget constraint (SBC) syndrome (Kornai 2009 and Kornai et al. 2003). Kornai developed the concept of SBC for socialist countries in transition, but it is currently used in a broader context, including markets with private organizations where a potential supporting organization, such as the government, is present. The basic idea behind the SBC is that the presence of such a rescue organization makes the firm act as if its budget constraint were not binding and the firm is more inclined to create a negative result. Why would an organization have incentives to soften the budget constraint of a firm? Dewatripont and Maskin (1995) and the literature evolving from their paper claim business motivations. They argue that supporting organizations, which can also include banks and private investors usually with concentrated claims, may have incentives to extend the expiry of loans or reinvest in order to allow the firm to continue operating. Continuation in these cases may protect the value of these stakeholders' claims, unlike liquidation that more likely reduces the asset value. This argument is close to the current practice of the Dutch government (NZa 2010a), and is also the most relevant reason for our research. Furthermore, Shleifer and Vishny (1994) mention political interests, particularly relating to job market concerns, as a reason for softening the budget constraint. This motivation has already appeared in some arguments relating to government bailouts of hospitals (see FD 2010b about the case of Atrium MC). Finally, paternalism may also motivate the supporting organization to rescue a firm, mainly in cases when it owns that firm (e.g., public companies). Augurzky et al. (2009) in their empirical paper on the German hospital market show that public hospitals have a higher probability of default than private hospitals, although they do not analyze the reasons for that.²⁸

As the definition might have already suggested, the SBC decreases ex ante efficiency because every stakeholder has incentives to take advantage of the possibility of government support. First, managers may exert less effort to strengthen the hospitals' financial performance and operate less efficiently. Nonetheless, one may argue that hospitals may also use government support to invest in quality and in this way increase utilization and eventually revenue. However, as Duggan (2000) shows in his empirical research conducted in the US, private – both non-profit and investor-owned – hospitals rather convert public funding to their holdings of financial assets than improving health care by investing in equipment. And even if managers

²⁸ Kornai et al. (2003) list maintaining reputation, avoiding economic spillover effects, and corruption as further reasons for softening the budget constraint of firms. However, these reasons do not seem relevant in the Dutch hospital market.

convert government support to investments, they have incentives to engage in too risky projects (i.e., the ‘gambling effect’).

Second, the anticipation of government support decreases creditors’ risks and as a consequence, creditors reduce their monitoring effort. In addition, by providing temporary loans, the government becomes a creditor with low priority. Based on the argument of Shleifer and Vishny (1997), multiple creditors have weaker incentives to monitor due to the free-riding behavior. Therefore, an additional creditor lowers the monitoring effort of other creditors. Also, the government as a creditor distorts monitoring efforts because it is less efficient (i.e., faces higher costs of) in collecting information than private stakeholders.

Finally, the SBC safeguards the position of medical specialists, and therefore reduces their incentives to exert effort in order to keep their contracts and protect their goodwill. Furthermore, the SBC creates additional incentives to behave opportunistically. Partnerships but also individual specialists can exploit potential government support by emphasizing their importance within the hospital organization and negotiate a better financial position for their own specialties (e.g., better equipments).

Regarding the first role of the government, that is regulation, the relating imperfections reduce hospitals’ incentives to improve their financial performance. For instance, budget equalization can lead to a moral hazard problem. It may give additional incentives to less efficient or lower quality hospitals to increase production in order to be compensated more. Consequently, the benefits that more efficient and higher quality hospitals could gain to recoup their investments will be eroded. As another example, regulatory uncertainty can lead to lower financial incentives and postponed or lower level of investments.²⁹ However, less investment is not per se harmful for a firm’s financial performance. It can reduce the likelihood with which the hospital engages in excessively risky projects (i.e., the gambling effects), and as a consequence, lower the probability of financial problems. In short, regulatory imperfections create inefficiencies by a moral hazard problem or uncertainty, and so reduce the financial incentives of private stakeholders. Therefore, they can be seen as elements that amplify the SBC syndrome.

Ex post efficiency

The SBC also affect ex post efficiency, particularly by increasing a bias towards continuity. Even creditors that primarily prefer liquidation may shift their preferences towards continuity, as government intervention will protect the value of their claims.³⁰ (Informal) reorganization will then be a more preferred form of overcoming financial distress. We can indeed observe this phenomenon in practice. First, the bankruptcy law supports this practice. As we presented in Section 2, in an environment where creditors’ claims are concentrated and non-physical capital is present, informal reorganization is the most preferred bankruptcy procedure (see Jostarndt and Sautner 2010). Second, recent Dutch cases reviewed in Section 3 are also evidences for informal workouts.

²⁹ A wide range of empirical as well as theoretical papers exists, particularly in the field of energy markets that analyze the effects of regulatory uncertainty on firms’ financial performance. Robinson and Taylor (1998) in their empirical study showed the volatility of returns in energy markets in the presence of regulatory uncertainty. After regulatory interventions, not only the variance of stock returns but also the cost of capital of a regulated firm increased. Complementing the review of Joskow (2010), the option value theory gives some additional insight into investment incentives in the energy markets. The main idea is that regulatory uncertainty creates an option value in the sense that firms can constantly adapt their decisions to newly emerging information about regulation. Teisberg (1993) argues that due to this option value, firms have a preference to engage in smaller projects, delay larger investments, and even abandon projects if the future regulation turns out to be unfavorable. Ishii and Yan (2004) confirm the presence of this option value in their empirical paper. They show that the investment level can be lower even a few years prior to enacting new regulation.

³⁰ We will elaborate on the bias of stakeholders towards continuity or liquidation in the coming sections.

As a consequence of strong preferences for continuity, those hospitals that are financially not viable continue to operate and eventually wind up. As Landry et al. (2009) show, a very large proportion, 67% of filing US hospitals were eventually liquidated within a couple of years.³¹ Furthermore, Jostarndt and Sautner (2010) also find that 87% of German firms that went bankrupt got eventually liquidated. Hence, a bias towards continuity increases type I error and so ex post inefficiency.

Table 4.1 Public governance has negative effects on the efficiency of bankruptcies

Ex ante efficiency	Ex post efficiency
<p><i>Negative effects</i></p> <ul style="list-style-type: none"> - SBC (anticipation of government support) creates opportunities for stakeholders to turn their attention away from hospitals' financial performance towards their own interests - Regulatory imperfections create inefficiencies via moral hazard or uncertainty 	<p><i>Negative effects</i></p> <ul style="list-style-type: none"> - SBC increases bias towards continuity => Unjust reorganization: type I error

Hardening the budget constraint

As can be seen, the soft budget constraint syndrome has negative effects on both the ex ante and ex post efficiency of bankruptcy procedures. The question is whether the government can improve upon efficiency. Hardening the budget constraint can only be achieved by creating a credible commitment to less intervention. The underlying argument is the following. Suppose there is no commitment. This is a very plausible assumption in practice because the government has incentives for regulatory flexibility, e.g., in the form of keeping conditions open about when to provide financial support. As Shleifer and Vishny (1994) suggest, political motivations can be such incentives. For instance, by bailing out a hospital around elections, the (local) government may increase its voting base because patients prefer having access to a local hospital and the medical staff can also keep their jobs. However, as Levy and Spiller (1994) argue, flexibility has negative consequences. The more flexibility a regulator has, the weaker incentives it gives for firms to increase efficiency. Therefore, to protect these incentives, the government needs to be more consistent with its measures and commit to them. In the case of the Dutch hospital market, it implies that the government needs to clearly define public interests and specify the conditions for intervention. For instance, the current 45-minute norm is such a measure: in the case of emergency, patients need to get access to emergency room services with 45 minutes. However, we have to note here that such specific conditions should not divert attention away from the more general context of public interests and the relation among public goals.

The question thus remains whether a commitment to less intervention itself is sufficiently credible. If the government fully abstains from intervention, private stakeholders bear the costs of financial distress and may not be able to provide market-based solutions to bail the hospital out. Therefore, to guarantee the continuity of care and protect public interests, the government may still need to intervene. However, then it will either bear the costs of financial distress or may ex post require stakeholders to contribute substantially to bailouts.

³¹ Another phenomenon has already been observed in the US but only for investor-owned hospitals (see Landry et al. 2009). Because of the anticipation of government support, it is more likely that for-profit hospitals default strategically in order to reorganize and thus create a potentially higher asset value at which the hospital can later be sold (White 1989).

This weakens the credibility of commitment. Therefore, a non-intervention regime needs to be accompanied by measures that provide sufficient financial incentives for private stakeholders. We will elaborate on this issue in the coming sections on private and professional governance.

Conclusion

Overall, the current public governance of Dutch general hospitals is negatively affecting the efficiency of bankruptcy procedures. Even though the government aims at eliminating market failures and safeguarding the continuity and affordability of essential health care, by doing so it creates government failures. The most detrimental effects are relating to the anticipation of government support, that is, the soft budget constraint syndrome. Ex ante, the SBC reduces managers' incentives to increase efficiency, creditors' incentives to monitor, and allows medical specialists to keep their jobs without additional effort and to behave opportunistically. Ex post, the SBC promotes continuity, thus increasing type I error. To improve upon efficiency, the government needs to harden the budget constraint of hospitals. Commitment not to bail out is essential in that respect: defining conditions of intervention clearly and above that allowing little regulatory flexibility. The question remains whether the government is able to credibly commit to a non-intervention regime. We analyze this question in the following sections.

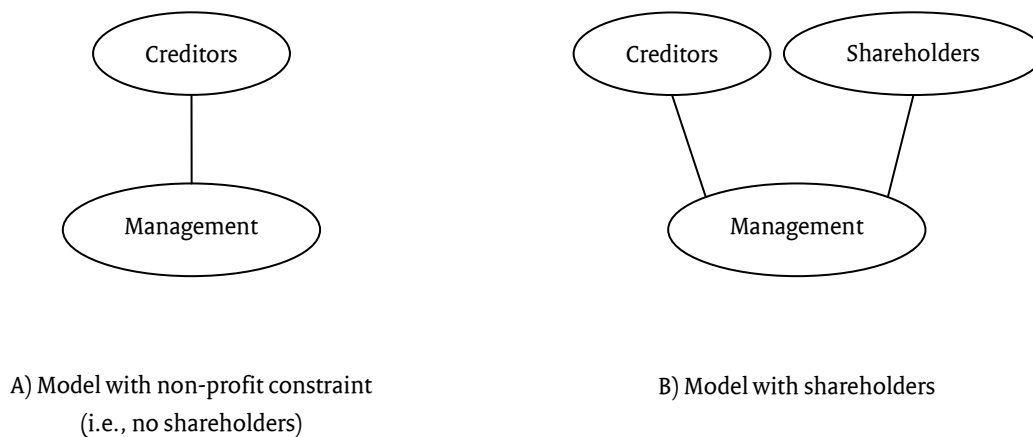
5 Private governance

We argued earlier that the private governance of hospitals is largely determined by the non-profit constraint. For this reason, most of the attention in this section is focused on this issue. In particular, to analyze how the non-profit constraint of hospitals affects the efficiency of bankruptcies, we abstract from interventions of (local) governments. As such, the key question is how bankruptcies will look like in a world wherein governments are committed to abstain from direct support.

Characterization of private governance

Currently, creditors of hospitals in the Netherlands typically are banks with concentrated claims,³² whereas the non-profit status of hospitals excludes capital from shareholders – see also model (“A”) in Figure 5.1, which differs from the conventional model (“B”) with shareholders. Next to the creditors and the management, private insurers also determine the private governance of hospitals.³³ Private insurers that contract hospitals are important creditors (and stakeholders) of hospitals, as they provide advanced payments (NZa 2009b). Private insurers also have an interest in the continuation of hospital services, as they are responsible for maintaining hospital services to their clients. This particularly holds in areas with few hospitals, where the opportunities for redirecting clients to other hospitals are limited.

Figure 5.1 Different models of private governance



Until recently, (formal) bankruptcies were virtually nonexistent among Dutch hospitals. Moreover, recent experiences show us that (local) governments were in fact willing to support hospitals, so as to ensure the continuation of hospital services. From this perspective, the private governance of hospitals has not been put to the test: creditors, insurers, and the management did not need to consider the possibility of the (ex post) settlement of claims when liquidation should occur. Now that the central government wants to abstain from (further) interventions, the question emerges how private governance will evolve in the coming years. To answer this question, we largely have to rely upon the theoretical literature, as such a situation would be new – at least in the Dutch context.

³² See for instance tables A4 and A6 in the Appendix

³³ In some instances, when periods of financial distress have occurred in the past, (local) governments may have become creditors, too.

We have argued in Section 2 that the standard model for private governance does not call for any intervening role for the government, except for offering the judicial framework for formal bankruptcies. Yet, it has to be stressed that the private governance of hospitals is different from the standard case with debtors and creditors, as all Dutch general hospitals are faced with the non-profit constraint. Obviously, hospitals may in principle still attract private equity when the non-profit constraint prevails, but this is not very likely in practice.³⁴ As a consequence, the role of creditors is different from the standard model with debtors and creditors. To start with, the absence of shareholders renders the APR largely redundant for concentrated creditors;³⁵ apart from the equity of the non-for profit (NFP) organization itself, there are no shareholders bearing the downside risk of financial distress. This is particularly relevant for the current Dutch hospital market, which generally shows low solvability ratios. Thus, creditors bear the downside risk of the hospital, while the upside risk is transferred to the equity of the foundation (and not to shareholders). This combination of incentives may affect both the ex ante and ex post efficiency of hospital bankruptcies. In order to assess these effects, this section compares the private governance modes in the Dutch hospital market with and without the NFP condition.

Ex ante efficiency

When assessing the effects of the NFP condition on the likelihood of financial distress, it is important to distinguish between effects on investment choices on the one hand, and effects on the effort level of the hospital management to avoid financial distress on the other hand. As to the first effect, one may expect creditors to concentrate on lowering the downside risk of financial distress. As such, they are inclined to finance investments and projects with low financial risks. Accordingly, the likelihood of financial distress is lower. This is confirmed in the US, where it seems that for-profit (FP) hospitals indeed are active in more competitive and dynamic market segments than NFP hospitals, with higher risks of bankruptcies (see Section 2). In these markets, the need for equity of shareholders is higher, which serves as a comparative advantage for FP hospitals (Wedig et al. 1988).³⁶ This may come with a lower ex ante efficiency from the perspective of bankruptcies, but contributes to the dynamic efficiency in the market. We return to this issue in the end of this section.

Next to the consequences on hospital investments, the NFP constraint may affect the effort levels of the hospital management, so as to achieve cost-efficiency and thus avoid bankruptcies. The conventional wisdom in the literature is that shareholders spend more effort in monitoring and disciplining the management (e.g., by replacing them by other managers) than creditors do (Hansmann 1980). This would then cause effort levels to be higher than in NFP organizations. This difference in monitoring is also largely reflected in the design of private governance of non-profit organizations: the management has no formal responsibility in informing creditors and stakeholders and there are only limited possibilities to interfere with the management in times of financial distress. This lack of effective monitoring also holds in governance models with a supervisory board for non-profit organizations (Hoek 2007).³⁷

³⁴ The recent experiences with the Slotervaartziekenhuis are probably the most prominent case where private equity was attracted (see Appendix 9.2). Yet, it seems that these capital suppliers do in fact share the upside risk of the hospital, as returns are related to financial performance.

³⁵ We have to note here that a complicated debt structure with different seniorities might make the APR again relevant.

³⁶ Moreover, the asset value of NFP hospitals is often committed to the provision of local services.

³⁷ To counteract these problems, a new judicial form has been introduced in the Netherlands to increase the role of stakeholders of non-profit organizations – the so called ‘social private organization’ (In Dutch: “De Maatschappelijke onderneming”). The use and the effects of this new judicial form on the actual governance are however limited, as it does not fundamentally change the interests of creditors and other stakeholders – its instruments may increase the strength of stakeholders, but are effectuated only to a limited extent (Koning et al. 2008).

The lower level of monitoring may be a reason for NFP organizations – like hospitals in the Netherlands – to show low effort levels to avoid bankruptcy, lower (cost-) efficiency levels and thus a higher likelihood of bankruptcies. But is this in fact the case? Indeed, the monitoring argument stresses the potentially disciplining role that debtors may have to avoid rent extraction. NFP organizations lack such a role, which may cause rent extraction by the management – that is, less effort and higher wages. This may increase the likelihood of bankruptcies. At the same time, however, the non-distribution-constraint of financial surpluses that NFP organizations have – particularly the tax exemptions that come with it – may result in lower costs (Hansmann 1980). These effects may be magnified by ‘donated labor’: NFP organizations may attract workers that are intrinsically motivated to fulfill their missions. Donated labor is the most influential argument of economists for public or NFP provision, particularly in sectors where quality aspects of output are hard to contract upon (Francois 2001). The very lack of residual claimants or profit motive provides a commitment to the worker: it tells that, in principle, there is no individual or group standing to gain from converting donated effort into extra profit for them.

It thus remains merely an empirical question whether FP or NFP hospitals are more cost-efficient and, accordingly, have lower bankruptcy rates for this reason.³⁸ Ruhm and Borkoski (2000) find FP hospital workers in the US to have similar wages as NFP hospital workers. Roomkin and Weisbrod (1997) do find differences, but this concerns the relative importance of fixed and performance related payments, rather than the absolute wages that are paid. Similar to wage payments, cost and efficiency measures can be informative on the rent extraction of NFP organizations. Lower cost levels and high efficiency levels point towards higher surpluses – particularly as a result of donated labor – whereas the opposite suggests rent extraction to be the dominant factor. In a recent meta-study, Shen et al. (2005) review the literature on cost and efficiency differentials as from 1990. They argue that sufficient variable controls at the level of patients, hospitals and market characteristics are needed for a fair comparison between NFP and FP organizations. In such a setting, only few differences between organization types are found. The picture thus emerges that FP and NFP hospitals are not systematically different in terms of cost-efficiency.³⁹

Returning to the Dutch context, there is one more argument why NFP and FP hospitals would not differ substantially in terms of monitoring activities. We already stated that typically only a few banks act as major creditors of a NFP hospital (‘concentrated ownership’). These creditors are not entitled to receive any profits and have no effective priority of claims when bankruptcy occurs. Thus, creditors have similar interests in preventing bankruptcies as debtors of FP hospitals. One may even argue that only a few banks have stronger incentives to monitor and intervene in the hospital management than multiple creditors have, as free rider problems that are common with multiple creditors do not prevail here (Schleifer and Vishny 1997). At the same time, of course, the need for such arrangements may also be higher if the management anticipates the help of creditors when ownership is concentrated (Dewatripont and Maskin 1995).⁴⁰

³⁸ See e.g., Koning et al. (2007) for a survey on social services sectors.

³⁹ The empirical literature on differences in bankruptcy rates between NFP and FP hospitals is very limited. One exception are Augurzky et al. (2009), who find for Germany that the probability of default for FP hospitals is slightly lower than for public and NFP hospitals.

⁴⁰ If claims of creditors are concentrated, then creditors have no interest in filing for a bankruptcy too soon. This in turn also lowers incentives for the management to prevent financial distress. Note, creditors that have no priority of claims have similar interests. This argument essentially resembles the soft budget constraint (SBC) phenomenon (Kornai et al. 2003; see for more details in Section 4 on public governance). As a remedy, Von Thadden (1995) claims that a commitment from creditors not to bail out may be an optimal ex ante measure if creditors face adverse selection, such as the case in the hospital market.

We conclude that the effect of the non-distribution constraint on the performance and cost-efficiency of hospitals is ambiguous and probably small (see also Koning et al. 2007). Still, there is a major difference when it comes to the types of investments of NFP hospitals, with creditors being more likely to focus on the safe side. Within the context of bankruptcy theory, this contributes to ex ante efficiency, that is, a lower probability of financial distress. However, when we broaden the perspective to dynamic efficiency, that is, to investments and innovations, the general constraint on the distribution of profits in the Dutch hospital market may have a negative effect. Such innovations would be beneficial to clients in the long run. Or, as Robinson (2002) argues, capital equity is necessary for the hospital market to refurbish physical facilities, upgrade clinical and information technologies, and rebuild financial positions.⁴¹

Ex post efficiency

Key to our analysis is that, in the standard model of private governance, conflicts of interest between debtors and creditors are most prominent in times of financial distress. These conflicts of interest cause costly and time-consuming negotiations and also (indirectly) deteriorate ex ante efficiency - that is, the management and shareholders may anticipate some debts to be discharged by creditors in times of financial distress. In the absence of shareholders, like in NFP hospitals, these conflicts of interest are likely to become smaller. There are no shareholders who push the management to default strategically or to delay the process of reorganization, holding on to the unlikely prospect of recovery.⁴² Similarly, without effective priority rules creditors also have no interest in filing for liquidation too early, as they cannot transfer the financial losses to shareholders. The incentives of stakeholders thus are more aligned in times of financial distress, yielding a higher level of ex post efficiency.⁴³ There is also no a priori reason to believe that a bias towards bankruptcy or continuation of the hospital will occur for this specific reason.

Although the process of bankruptcy may benefit from the alignment of incentives in the private governance of hospitals, there are also arguments pointing at a lower ex post efficiency and a bias towards liquidation. In particular, monitoring the financial conditions of NFP organizations is inherently more difficult than of FP organizations. Particularly in times of financial distress, creditors have a hard time in assessing the equity value of the corporation. Related to this, the option value of bailing out NFP organizations is lower, as creditors cannot share in potential future upside risks - these only accrue to the foundation (Gertler and Kuan 2009). The creditor thus needs to be compensated with higher interest rates for this, but this in turn lowers the prospects of a full recovery. As a result, the ex post efficiency is reduced, and there is a bias to liquidation of the hospital. In the case of equity holders, the benefits of reorganization would not be limited to a reduction in downside risks, but also a share in the future upside risk would be available. Therefore, attracting further private capital may be easier.

⁴¹ There is also some evidence of market spillovers between FP and NFP hospitals (Hirth and Grabowski 2001). That is, in mixed markets of private hospitals, FP hospitals raise the quality of their services to the level of NFP hospitals, whereas NFP hospitals improve their efficiency to the level of FP hospitals.

⁴² As to strategic defaults, this mechanism can partially be offset by the fact that the number of creditors is limited. Under those circumstances, the management has more incentives to default, as claims are concentrated and creditors are therefore more likely to respond (Bolton and Sharfstein 1996).

⁴³ In contrast to banks as creditors, private insurers may have an additional interest in the continuation of services, as they are obliged to maintain service provision for their clients. As a result, the interests of banks and private insurers are not aligned. Given the share of credits by insurers and the opportunities they have in contracting other hospitals, however, the consequences of this are likely to be small.

Conclusion

Although the current literature is not exhaustive on the interrelation between judicial forms and bankruptcies, we conclude that the non-profit constraint is likely to reduce the (ex ante) risk of financial distress. In the absence of shareholders, creditors experience the downside risk of new investments. This induces a bias towards less risky investments, and, accordingly, a lower risk of financial distress. As to the ex post efficiency criterion, the non-profit constraint is likely to result in a bias towards liquidation. For creditors, the option value of bailing out NFP organizations is lower, as creditors cannot share in future upside risks. So the overall conclusion is that financial distress is less likely to occur, but if so, it will result in more liquidation.

Table 5.1 Non-profit constraint: positive ex ante effects but potentially unjust liquidation

Ex ante efficiency	Ex post efficiency
<p><i>Negative effects</i></p> <ul style="list-style-type: none"> - Less monitoring without shareholders - Less market dynamics, dynamic efficiency 	<p><i>Negative effects</i></p> <ul style="list-style-type: none"> - No possibility for private equity and potentially higher premiums to attract new capital => Lower asset value and less options to sell and/or reorganize the hospital => Unjust liquidation: type II error
<p><i>Positive effects</i></p> <ul style="list-style-type: none"> - More monitoring due to concentrated claims of creditors that are mainly banks - Intrinsic motivation of labor - Less incentives to enter risky projects 	<p><i>Positive effects</i></p> <ul style="list-style-type: none"> - More aligned interests of stakeholders => Less strategic default
<p><i>Net effect is likely to be positive</i></p>	

When taking a broader perspective, the effects of the non-profit constraint on the hospital market mostly relate to its dynamic efficiency. Incumbent hospitals are less likely to invest in new techniques, while entrants find it hard to start a new foundation with the capital that is needed for that. With hospitals liquidating, there should also be room for new entrants. As the NFP constraint hinders the possibilities to attract new capital, there is more pressure on the government as a third party to bail out the hospital. We return to this issue in Section 7.

6 Professional governance

In this section, we discuss the role of professional governance in relation to financial distress in a situation without government support. We consider the role of medical specialists separately from private governance.

Characterization of professional governance

A key characteristic of the professional governance of Dutch general hospitals is that a large proportion of medical specialists is self-employed (see Section 3.1). Every self-employed specialist concludes a contract with the hospital following a standardized format.⁴⁴ This contract implies no hierarchical relation between specialists and the hospital (Hoek 2007). Medical specialists are formally independent from the hospital organization, yet they have to work closely together as they provide complementary inputs for health care services. Self-employed specialists form partnerships of specialties, in which every specialist has to invest approximately a yearly remuneration as goodwill.

The hospital is governed by the board of directors (i.e., management), which is overseen by a supervisory board.⁴⁵ Within the current Dutch system of regulated competition, the management is responsible for the quality of care and for financial results (NZA 2010b). The hospital management occasionally includes a medical specialist (see examples in the Appendix).⁴⁶

Medical specialists enjoy professional autonomy, which primarily concerns the treatment of patients, but in practice also manifests in other areas.⁴⁷ They have an information advantage compared to the management based on their medical knowledge and on performing the actual diagnosis and treatment of patients. Furthermore, there is a scarcity of medical specialists. Therefore, within their relationship with the management, the specialists seem to have the most powerful position. This unique position of medical specialists makes the hospital's governance more complex.

Figure 6.1 shows the difference between the current Dutch model and a common organization structure with employees only. Another relevant characteristic of the current Dutch situation that can be seen in the figure is that not only the specialists and the management have to make agreements (e.g., through contracting), but the actions of specialists also influence the position of creditors (e.g., insurance companies). In the case of employed specialists, creditors only have direct contact with the hospital management.

A final important characteristic of professional governance is the existence of information asymmetries with patients. The patient needs the specialist to make a diagnosis and to tell him which treatment is optimal. Dranove and Satterthwaite (2000) argue that this is exactly the reason why specialists had acquired such an important and independent position when the modern hospital started to develop: it was their role to act as professional agents to their patients, while the hospital just had to supply the necessary inputs in an efficient way given the physicians' clinical decisions (Harris 1977). However, other researchers stress that the specialist

⁴⁴ Model Toelatingsovereenkomst. See http://www.nvz-ziekenhuizen.nl/Werkgeverschap/Cao/Model_Toelatingsovereenkomst_2006.

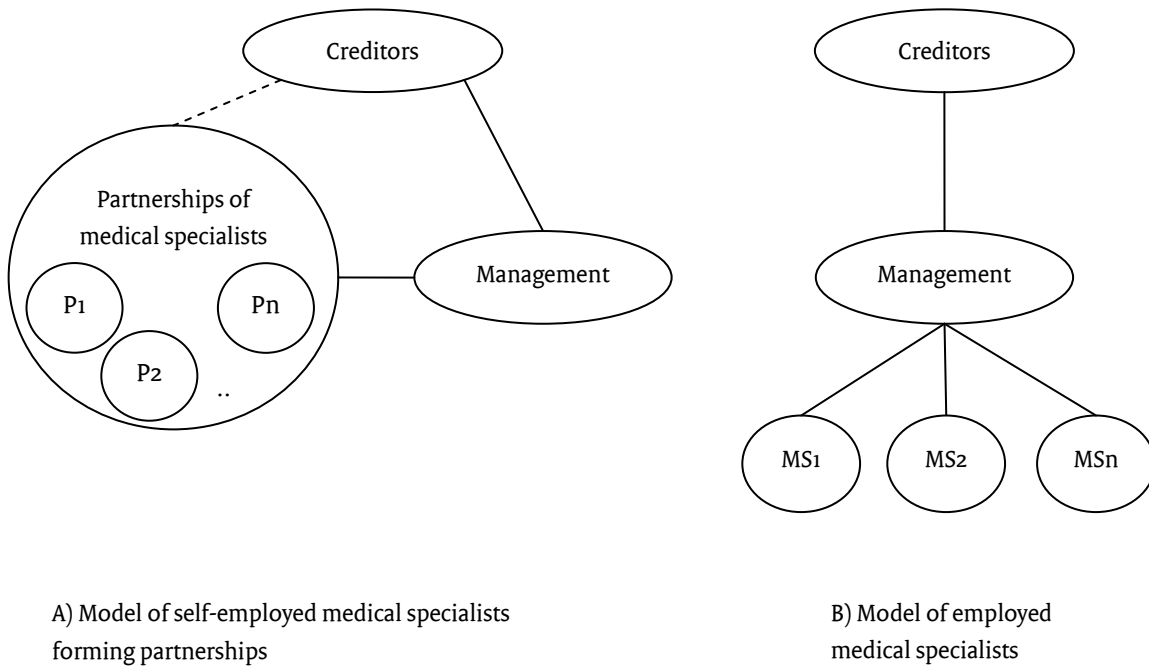
⁴⁵ The supervisory board is an independent body, which is appointed by the hospital's stakeholders. Because it has no direct link to medical specialists, from now on we focus our attention only on the relationship between the management and specialists.

⁴⁶ In practice, specialists may even have a strong position in appointing and dismissing the management. See in the Appendix for instance the case of IJsselmeerziekenhuis.

⁴⁷ For example, specialists cannot be forced to disclose the results of their quality reviews written by other doctors to the hospital board (RVZ 2009). Currently, some scientific associations make these results routinely available to the board, and other organizations are considering introducing that (see <http://orde.artsennet.nl/>, accessed on 9 March 2011).

indeed acts as a professional agent for his patients, but not completely: he also tries to defend his own interests and can often do so without harming the patients' interests (Mot 2002).

Figure 6.1 Different models of professional governance



Under a fee-for-service system, specialists may supply more care than is socially optimal. As we discussed in Section 3, Dutch hospitals are currently in a transition phase to regulated competition, which is intended to stimulate efficiency. However, as the government is still concerned about cost increases, budgeting has not been abandoned yet. Moreover, increasing competition makes quality and efficiency in care provision more important. In order to assess the effects of professional governance on the ex ante and ex post efficiency of bankruptcies, we consider the above-mentioned characteristics of the Dutch hospital market and, where necessary, compare the current Dutch model with partnerships of self-employed medical specialists with a standard model of employed specialists.

Ex ante efficiency

In this subsection, we first assess how professional governance affects the ex ante efficiency of bankruptcies in a narrow sense, that is the incentives of self-employed medical specialists to avoid financial problems. After that, we broaden the concept and analyze whether specialists have incentives to make the hospital more efficient and profitable, and therefore to lower the probability of future financial distress.

First of all, we argue that medical specialists who are currently contracted with the hospital have no better outside options beyond their current position: they face large switching costs, particularly due to the goodwill that they have to pay to join a partnership or other investments they have to make (e.g., for

establishing a new practice), and the present value of the future income stream does not compensate for that.⁴⁸ Therefore, in the narrow sense of ex ante efficiency of hospital bankruptcies, self-employed specialists and similarly, their partnerships have a large interest in keeping the hospital away from financial distress. If the hospital goes bankrupt, contracts between the hospital and specialists are dissolved. As a consequence, specialists lose their income, which is a temporary effect, lose part or all of their investments, and face the cost of bad reputation. Therefore, ex ante efficiency in the narrow sense is positively affected by the presence of partnerships of specialists.

The incentives to increase efficiency in a broader sense are more ambiguous. Specialists in general aim to maximize their own utility, which is based on income, leisure, ethics, pleasant work etc. (Mot 2002). As we described in Section 3.1, hospitals face regulated competition that aims at the affordability of good quality and widely accessible care. Therefore, prices of a large group of treatments (A-segment) are regulated and the hospital's budget is limited. The question is how the prevailing payment system influences the financial and other incentives of self-employed medical specialists and the hospital and whether it is able to balance them. We argue that there is a tension between these incentives.

The current Dutch DRG system in many respects resembles a fee-for-service system in as far as it concerns the payment for medical specialists.⁴⁹ We explained in Section 3 that the remuneration of self-employed specialists depends on the volume of their production. Under this payment system, self-employed specialists have much stronger financial incentives to produce than salaried medical specialists do (Robinson 2001). Kok et al. (2010) review the literature and find convincing evidence that employed specialists produce less care than specialists who are paid according to their production (Gosden et al. 1999, Chaix-Couturier et al. 2000, Cangialose et al. 1997). Part of this effect can be attributed to the selection of specialists into employees and self-employed specialists. Increasing production may be beneficial for the hospital under the planned scheme of integrated funding up to a point. As production increases, fixed costs may become overcompensated and thus profitability also increases. However, additional production growth may necessitate investments in new capacity, which again increases costs.

Other aspects of the current financing system also underlie the conflicting financial incentives of hospitals and medical specialists. First, the DRGs prices are not always accurate representations of the true costs of hospitals and specialists, and the hospital and medical specialists also experience a different profitability on certain DRGs. Second, because specialists in general do not have to pay for the use of hospital resources or only to a limited extent, these resources may be overused. Robinson (2001) argues that the efficient use of hospital resources is likely to be suboptimal for this reason. However, Kok et al. (2010) conclude that the limited evidence on whether employed or self-employed specialists are more cost-efficient is mixed. Some studies they review found that employed physicians requested fewer diagnostic tests, such as X-rays and ECGs (Gosden et al. 1999, Chaix-Couturier et al. 2000). On the contrary, Madison (2004) studying the treatment of patients suffering from a heart attack, found that hospitals with employed physicians had more treatments without additional effects on mortality.

⁴⁸ With this assumption, we claim that medical specialists with a more valuable outside option have already switched to another hospital.

⁴⁹ One difference is that specialists run some risk on very sick patients. Even though the Dutch DRG system is very detailed, specific patients may need more care than is included in the DRGs, but this will likely to be compensated by patients with the same DRG who need less care.

The misaligned incentives among independent specialists and the hospital do not only directly affect the volume, composition, and efficiency of production, but may also hamper the hospital's governance. For example, specialists may be opposed to results from peer reviews being available to the hospital board or to being subject to regular performance interviews.

Holmstrom and Milgrom (1994) consider the balance of workers' incentives.⁵⁰ They stress that a worker with substitutable tasks (e.g., in the hospital market, creating income, providing good quality services, preserving the value of hospitals' inputs etc.) should have balanced incentives for these different tasks. Being an employee with low-powered incentives and being self-employed with high-powered incentives can be seen as two coherent packages of balanced incentives. To translate it to the case of medical specialists in the Netherlands, the incentives of medical specialists are unbalanced: self-employed specialists have a strong incentive to increase production, while incentives for cost-efficiency, including the efficient use of resources, are low. Treating self-employed specialists as real entrepreneurs, who have to pay the hospital for their inputs, would make their package of incentives internally more coherent, but still not completely aligned with those of the hospital regarding volume incentives. The incentives of employed specialists not to increase production are better preserved and in that respect, are also not fully aligned with the hospital's goal. Evidence does not show clearly whether they have the proper incentives for the efficient use of inputs. Therefore, under the current Dutch circumstances, an extreme solution - pure entrepreneurship or pure employment- would probably not be optimal for ex ante efficiency. Efficiency may be improved by finding other forms that better align the incentives of specialists and hospitals.⁵¹

Some Dutch hospitals have already made attempts to improve this alignment within the existing regulation (NZa 2009c). For example, the hospital Onze Lieve Vrouwe Gasthuis in Amsterdam has compensated specialists for their investment in goodwill and offered them employee contracts. At the same time, these specialists became financially responsible for the payment of the support staff and the purchase of new technologies. Based on this system, good results are currently rewarded with a bonus. Another way of getting incentives aligned is to form a joint venture of the hospital and its partnerships of specialists. In that construction, specialists remain entrepreneurs but become more interested in the hospital's performance, and thus in the effective use of hospital resources.

All in all, the current organization of hospitals with self-employed specialists that are paid per DRG has ambiguous effects on the ex ante efficiency in a broader sense. The effect on the productivity of specialists is positive, while the evidence on the efficiency of production is mixed. The conflicting incentives of the hospital board and physicians complicate the hospital's governance substantially. An alignment of the hospital's and specialists' incentives could result in other organization forms and payment systems rather than extremes, such as a pure salary system or pure entrepreneurships. In such a setting, ex ante efficiency of bankruptcy in a broader sense may be improved by such an alignment while leaving ex ante efficiency in a narrow sense unaffected.

⁵⁰ We should note here that they analyze firms' decisions in a broader context than bankruptcy only.

⁵¹ However, given the importance of information asymmetry among patients and specialists, it is unlikely that extreme solutions will be socially optimal, as the incentives for production are either too strong or too weak.

Ex post efficiency

In the current Dutch situation, all parties concerned with a hospital in financial distress expect that the government will eventually supply funds to save the hospital in an informal workout. Under those circumstances, (partnerships of) medical specialists, like other stakeholders, do not have to make a large effort to save the hospital, even if the continuity of the hospital is their interest. Without government support, specialists would have to consider how their interests in situations of financial distress are best served: by reorganization or liquidation.

In the case of liquidation, the hospital stops operating, therefore the contracts between specialists and the hospital also end. This implies that all self-employed specialists lose their current and future income from the practice (a temporary effect) as well as their investment in goodwill.⁵² Furthermore, they potentially face the costs of a bad reputation. Yet, if the hospital restarts after bankruptcy, which is possible in the Netherlands, better quality specialists are more likely to conclude a new contract with the new management.

In the case of reorganization (that can be either workout or moratorium), the picture is more complex. The management needs to present a reorganization plan to the creditors. According to that plan, contracts of some, particularly poorly functioning specialists may have to be dissolved. Therefore, specialists have a large interest in influencing the outcomes of reorganization. Furthermore, specialists may need to, and may also be willing to contribute financially to the reorganization. For instance, they can invest money in the hospital, lower their tariffs, and facilitate in the process of discharging some poorly performing specialist. Given the incentives of specialists, there is no reason to believe that they are biased towards continuation or liquidation.

However, because many parties are concerned with a successful reorganization (a large number of partnerships, the hospital board, creditors etc.), there may be severe coordination problems in reaching an optimal outcome. Casalino et al. (2008) show that coordination problems within group practices play an important role, even when there are no concerns of financial distress. Under financial distress, we can expect these problems to be more severe. As we claimed before, successful reorganization may require some inefficient or lower quality individual specialists or one or more partnerships to leave the hospital. Medical specialists or even a separate partnership might not be able to agree on such a solution because of the diverging interests among them. This increases the transaction costs of reorganization. Furthermore, in reorganization existing contracts among the hospitals and the specialists will not be automatically dissolved. This gives specialists a strong negotiating position. Specialists that have to leave will probably need to be reimbursed, that is, their goodwill has to be paid back. We argue that reimbursing goodwill is more expensive than discharging employees in case of financial distress. This makes reorganization more costly and less likely to be successful (i.e., potentially leading to liquidation) than in a similar situation with employees only. At the same time, free riding problems may also arise because specialists have private information about their performance and particularly those that are less efficient have a preference not to reveal their true private valuation. Thus ex post efficiency becomes probably lower by the presence of a large number of independent practices and a bias towards liquidation may occur. In short, in the absence of government intervention, the problem of type I error converts to type II error.

⁵² Alternatively, specialists may convert their goodwill and reputation into a new organization, for instance a small private clinic.

Conclusion

Without government support, ex ante efficiency in the narrow sense seems to be well taken care of, because specialists have a large interest in keeping the hospital away from financial distress in order to protect their contracts with the hospital. With respect to a broader concept of ex ante efficiency, the presence of self-employed medical specialists complicates the governance of the hospital considerably. Self-employed specialists are essential to the functioning of the hospital but have partly different incentives than the hospital board. We argue that neither a system of pure employment nor the current system of partnerships nor a system of pure entrepreneurship would be optimal because all three systems lead to an insufficient alignment of the hospital's and specialists' incentives. Ex ante efficiency in a broader sense could be improved by aligning specialists' incentives with the hospital's goals and this can be achieved by choosing a more balanced mix of incentives. The effect of the current professional governance of Dutch hospitals on ex post efficiency is likely to be negative, as the negotiation of several parties with diverging interests in the case of reorganization may become costly and lead to liquidation too fast. This would imply a type II error.

Table 6.1 Partnerships of specialists: mixed ex ante effects and potentially too fast liquidation

Ex ante efficiency	Ex post efficiency
<p><i>Ambiguous effects</i></p> <ul style="list-style-type: none"> - Different financial and other incentives of self-employed medical specialists (MSs) and hospitals 	<p><i>Negative effects</i></p> <ul style="list-style-type: none"> - Higher costs of reorganization because of reimbursing the goodwill of MSs - Possibility of inefficient negotiation due to a coordination problem and free-riding behavior among MSs <p>=> Too fast liquidation: Type II error</p>
<p><i>Positive effects</i></p> <ul style="list-style-type: none"> - MSs have incentives to avoid bankruptcy in order to keep their contracts with hospitals and preserve their goodwill 	
<p><i>Net effect ambiguous</i></p>	

7 Conclusions, policy options, and discussion

In the Netherlands, no hospital liquidation has occurred since 1993, but recently several hospitals have reported financial problems. These hospitals continued to operate after informal workouts and most of them received support, directly or indirectly, from state or local governments. At present, the government is reconsidering this role, and intends to abstain from direct intervention in the case of financial distress.

In this document, we analyzed the effects of government intervention on bankruptcy outcomes and how these outcomes would change if the government abstains from hospital bailouts. We based our analysis on Hart (2000) who distinguished the ex ante and ex post efficiencies of bankruptcies. Ex ante effects can be defined as the incentives of stakeholders to avoid financial problems or – to a broader extent – to optimize financial results. Ex post effects relate to maximizing the hospital's asset value determined by, for instance, the length of bankruptcy procedures, and to what extent bankruptcy outcomes lead to the continuity of inefficient hospitals that eventually liquidate (unjust reorganization or type I error) or to the liquidation of efficient hospitals (unjust liquidation or type II error).

We started our analysis by considering the current situation of the Dutch hospital market as a status quo. In this state of the world, the government regulates the market and directly intervenes if the continuity of care is in danger (public governance, based on Hoek (2007)). Then we assumed away government intervention and analyzed the effects of other characteristics of the hospital market separately: the non-profit constraint (private governance) and the presence of partnerships of self-employed medical specialists (professional governance; see Table 7.1). The non-profit constraint implies no shareholders and therefore, different incentives from for-profit organizations regarding monitoring efforts, risk-sharing, and providing financial support in the case of bankruptcy. Furthermore, medical specialists have an influential role with respect to the hospital's financial situation. A large proportion of medical specialists is self-employed and has different financial incentives than hospitals. Moreover, specialists form professional partnerships that provide them with a stronger negotiation position vis-à-vis the hospital management.

Taking these characteristics into consideration, we assessed different bankruptcy regimes and considered whether central and local governments can improve efficiency. We asked two sets of questions. First, do central and local governments need to abstain from direct intervention and if so, can they credibly commit to that, given the fact that the continuation of health care is regarded as a public goal and market-based solutions may not exist? Second, can a commitment to a non-intervention regime sufficiently protect the incentives of private stakeholders to avoid financial problems or to preserve the asset value of the hospital after financial distress occurs?

First, we found that public intervention negatively affects both the ex ante and ex post efficiency of bankruptcy procedures, particularly through the soft budget constraint (SBC) syndrome. Every stakeholder (the management, creditors, and medical specialists) anticipates the possibility of government support and takes advantage of it. As a consequence, incentives of private players to avoid financial problems are reduced. Also, the SBC amplifies preferences towards continuity and increases the likelihood of type I errors. These results hold true for both central and local governments.

Table 7.1 Policy options to increase the efficiency of hospital bankruptcies

	Ex ante efficiency	Ex post efficiency	Policy options
<i>Public governance</i> intervention is possible, thus soft budget constraint (SBC)	<i>Negative effects</i> - Stakeholders may take advantage of SBC	<i>Negative effects</i> - Stronger preferences for continuity => Possible unjust reorganization (type I error)	<i>Hardening the budget constraint:</i> credible commitment to non-intervention
<i>Assuming that the government commits to non-intervention...</i>			
<i>Private governance</i> non-profit constraint (NPC)	<i>Net effect probably positive:</i> <i>Negative effects</i> - Less monitoring without shareholders - Little market dynamics, lower dynamic efficiency <i>Positive effects</i> - Concentrated claims of creditors (i.e., banks): more monitoring - Intrinsic motivation of management, medical staff - Less risky investments	<i>Negative effects</i> - Due to NPC attracting private capital is difficult - Creditors bear downside risks, thus less willingness to invest or at higher interest rates => Less outside options to bail hospitals out => Possible unjust liquidation (type II error)	<i>Releasing the non-profit constraint</i> to attract private capital and facilitate entry in the case of bankruptcy
<i>Professional governance</i> partnerships of self-employed medical specialists (MS)	<i>Net effect ambiguous:</i> <i>Ambiguous effects</i> - Financial incentives of MS not fully aligned with hospital <i>Positive effects</i> - Strong incentives to prevent bankruptcy	<i>Negative effects</i> - High bankruptcy costs - Coordination problems => Possible unjust liquidation (type II error)	<i>Reconsidering the position of specialists</i> to align their incentives with hospitals

Even in the presence of a hard budget constraint, hospitals face additional inefficiencies in the case of financial distress because of the non-profit constraint and the presence of self-employed medical specialists. The non-profit constraint influences monitoring efforts in both directions. On the one hand, the lack of shareholders disciplines managers less. On the other hand, banks and insurance companies that have concentrated claims as creditors have stronger incentives to monitor because they bear hospitals' downside risks. Furthermore, non-profit organizations can attract workers that are intrinsically motivated to fulfill organizational goals. In addition, due to the lack of shareholders, upside risks are distributed to employees

and patients (i.e., no residual claimant). Therefore, market dynamics are lower, which has two counterweighing effects on ex ante efficiency: less innovative investment takes place but for the same reason, risky projects are also less likely. Overall, the effect of the non-profit constraint on ex ante efficiency is likely to be positive. When taking an ex post perspective, also due to little market dynamics in the case of financial problems, attracting private capital is difficult and creditors are only willing to invest at a high interest rate. As a result, reorganization becomes more expensive and hospitals have less outside options to be bailed out. Unjust liquidation may occur more easily, thus increasing type II errors.

Regarding professional governance, we distinguish ex ante efficiency in a narrow sense (i.e., incentives to avoid financial distress) and in a broader sense (i.e., incentives to increase efficiency). Given that a hospital is viable in the longer run, self-employed medical specialists have a clear interest in the continuity of the hospital in order to protect their contracts. This implies a positive effect on ex ante efficiency in a narrow sense. At the same time, we observe that there are conflicting financial incentives between self-employed medical specialists and the management (and employed specialists) that make it difficult to reach optimal ex ante efficiency in a broader sense. Self-employed specialists have strong incentives for production, but weak incentives for the efficient use of hospital resources. Hence, ex ante efficiency can be improved by aligning the incentives of hospitals and specialists. However, ex post, when financial distress has been reported, two inefficiencies may occur: higher costs of an informal workout than in a system with employed specialists only and coordination problems. Costs may increase because terminating the contracts of self-employed specialists is more expensive than dissolving the contracts of employed staff. Furthermore, coordination during financial distress implies high transaction costs because several partnerships have to negotiate about reorganization. These partnerships are likely to have diverging interests. As a consequence, the reorganization may fail and liquidation may become more likely, again increasing type II errors.

Based on these findings, our policy recommendations are as follows. The government needs to commit to a non-intervention regime in order to increase the efficiency of bankruptcy procedures. For that, it needs to define public interests and intervene only ex post and if these interests are in danger. In addition, the conditions of intervention need to be explicit. For instance, being able to get access to an emergency room within 45 minutes is such a measure. Under such a commitment, private stakeholders bear the total cost of financial distress: creditors bear total downside risks, the management may be discharged, and medical specialists may lose their contracts and goodwill. These costs can increase stakeholders' incentives to avoid financial problems. The question remains if the government can credibly commit to this non-intervention regime. If not and intervention becomes necessary, the government will bear these costs and may ex post require stakeholders to contribute substantially to bailouts. As a policy option, we claim that the credibility (and efficiency) of abstaining from government intervention can be better achieved if it is complemented by other measures that aim at reducing the inefficiencies of private and professional governance. Releasing the non-profit constraint and allowing private equity in the hospital's capital structure may increase market dynamics and reduce entry barriers. Hospitals can thus be more easily bailed out by private entities because shareholders will become residual claimants and gain from the hospitals' upside risks. However, we have to note here, that for the same reason, the likelihood of risky investments may also increase. As to professional governance, hospitals need to improve the alignment of their own financial incentives with those of the medical specialists. For example, the hospital *Onze Lieve Vrouwe Gasthuis* in Amsterdam has already made an attempt at this alignment by compensating specialists for their investment in goodwill, offering them employee contracts, and making them financially responsible for using hospital inputs. The government can contribute to this goal by paying attention to this alignment through regulation, for example, by coordinating the payment systems of hospitals and specialists.

However, in our document, we do not analyze the efficiency of the current development of regulated competition, such as macro-budgeting or the DOT. In addition, several other questions in relation to the bankruptcy procedures of hospitals are also outside the scope of this analysis and thus remain open. First, releasing the non-profit constraint will have a broader effect than just on the efficiency of bankruptcies, but we do not consider such other effects. Second, it might be of particular interest to policy makers to empirically assess hospitals' credit risks. Also, to empirically assess the potential risks of a harder budget constraint in the presence of the non-profit constraint and the current role of medical specialists, e.g., the likelihood of unjust liquidation and so the potential size of type II error. A relating interesting question is how much the risk premium should increase to compensate for this higher risk of liquidation. In addition, one may ask how the increasing likelihood of liquidation may influence the position of the WfZ. And finally, our document does not intend to assess the magnitude of ex ante and ex post inefficiencies. These questions remain open for further research.

8 References

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9 Appendix: Case studies from the Netherlands

In the Appendix, we present some recent cases of Dutch general hospitals in financial distress. For comparison, we first show some general information about the hospital market. Based on Zorgmarkt (2010b), the revenue of general hospitals and ZBCs increased by 13.4%, while their results increased by 2% in 2010. The average solvability of these hospitals was 15.0%, which is 0.4% point larger than in the year before. The revenues of the top 10 hospitals varied between 280 and 390 million euro in 2010, and the highest revenue hospital, Sint Antonius Ziekenhuis located in Nieuwegein and Utrecht, made a profit of 13.0 million euro and reached a solvability rate of 21.5%.

9.1 Slotervaartziekenhuis: overcapacity and competition⁵³

- History: The Slotervaartziekenhuis had faced financial problems for over decades. Privatization in 1997 did not solve financial difficulties. The hospital is located in the western part of Amsterdam, where it has two direct competitors. In 2004, the hospital was open for sale.
- Reasons for financial trouble: Overcapacity; competition with two hospitals also facing overcapacity; architecturally difficult and expensive hospital building.
- External remedies: First, it was announced that the hospital had been sold to professional semi-public organizations: to two housing corporations (De Key and Het Oosten) and to the Cordaan foundation, which provides care for elderly and handicapped people. However, in 2007, the Meromi Holding BV, an investment company bought the hospital for 26 million euro, which is a relatively low price. In that respect, the local government indirectly supported the new owner. Since 2007, the hospital has been an investor-owned organization, which raises concerns relating to the WTZi.
- Internal remedies: The management has been discharged. The new chairwoman of the hospital is the owner of Meromi Holding, and the currently 3-member board is extended by a medical specialist. Contracts with insurance companies have been renegotiated. Within a year, the 4.5-million-euro debt was converted to a 6.5-million profit, which is now the reserve of the hospital. The hospital still has a positive result and a relatively good liquidity.

⁵³ Source: newspaper articles, www.slotervaartziekenhuis.nl, Slotervaartziekenhuis (2009, 2010).

Table A.1 Slotervaartziekenhuis has achieved positive results and a relatively high liquidity ratio (balance in million euro)⁵⁴

	2010	2009	2008	2007	2006
Fixed assets	51.0	55.7	59.7	59.5	63.4
Current assets	69.9	58.4	50.7	37.7	38.9
Net assets	18.4	14.2	8.6	6.7	-0.9
Subordinated debt	3.9	3.9	3.5	4.6	4.6
Long-term liabilities	0.0	0.0	0.9	4.6	8.2
Current liabilities	98.4	95.4	96.8	80.7	88.5
Provision	0.3	0.5	0.6	0.6	0.7
Balance	121.0	114.1	110.4	97.2	102.3
Solvency %(a)	15,2	12,5	7,8	6,9	-0,9
Liquidity %(b)	71,1	61,2	52,4	46,8	44,0
Revenue	133.1	128.8	119.3	115.5	107.7
(%)	3.3	9.5	3.3	7.2	-
Result	4.2	5.7	1.8	6.3	-4.6

(a) Net assets/Balance
(b) Current assets/Current liabilities

Table A.2 Slotervaartziekenhuis had almost no long-term debt in 2010⁵⁵

	Year	Type of loan	Duration (years)	Amount (million)	Residue in Dec. 2010	Interest rate	Guarantee
Municipality of Amsterdam	1997	subordinated	n.a.	4.5	3.9	6%	n.a.

⁵⁴ Slotervaartziekenhuis (2010).

⁵⁵ Slotervaartziekenhuis (2010).

9.2 IJsselmeerziekenhuizen: inadequate management and insufficient quality⁵⁶

- **History:** The two hospitals IJsselmeerziekenhuizen in Lelystad and Emmeloord have faced a crisis due to inadequate management and supervision since 2002. This crisis eventually caused quality problems. For this reason, in September 2008, the IGZ closed the operation rooms and maternity care departments in these hospitals. Consequently, the supervisory board suspended the one-person management, Pereira, who is a medical specialist. In November 2008, the board also resigned. To bail the hospital out, an independent committee (Lodewick 2008), appointed by all stakeholders including the ministry of health (VWS), advised reorganization for labor market reasons and a joint capital investment by private and public parties.
- **Reasons for financial trouble:** Inadequate management and quality; IJsselmeerziekenhuizen are small hospitals in a less populated area. For these reasons, hospitals did not achieve a sufficient number of patients and so revenue.
- **External remedies:** In 2009, the MC Groep took over the hospitals for 15 million euro with an additional 5-million-euro extra investment in quality (a subordinated loan). Furthermore, municipalities and the VWS provided a subordinated loan of 10 and 14.5 million euro, respectively. Finally, the hospitals received an 18-million-euro grant from the NZa to fulfill its reorganization plan. The support is divided into three phases: immediate, in 2.5 years and in 5 years.
- **Internal remedies:** During reorganization, a new management was extended to three persons of the investors (the CEO is the owner of the MC Groep) and a new supervisory board of six members is elected out of which three seats are elected by the private investors and one by the government. 25% of staff was discharged (approximately 300 jobs), including 10 medical specialists. The hospital in Emmeloord could stay open only as long as it is financially feasible. To safeguard efficiency and quality, IJsselmeerziekenhuizen formed partnerships with other health care providers in the region. To facilitate negotiation with creditors, the MC Groep plans to substantially reduce the number of creditors. In the last two years, hospitals became profitable and reached a high liquidity ration.

⁵⁶ Source: Lodewick (2008), newspaper articles, www.ijsselmeerziekenhuizen.nl, IJsselmeerziekenhuizen (2009, 2010).

Table A.3 Positive profits and a high liquidity ratio accompanied with a negative solvency characterize IJsselmeerziekenhuizen (balance in million euro)⁵⁷

	2010	2009	2008	2007	2006*
Fixed assets	43.2	45.8	54.2	53.3	53.7
Current assets	23.9	25.7	14.5	35.4	38.4
Net assets	-24.4	-26.0	-27.6	-1.1	-3.3
Subordinated debt	-	-	-	-	6.0
Long-term liabilities	53.9	64.8	41.6	36.5	34.4
Current liabilities	32.7	25.0	32.7	51.1	48.4
Provision	4.8	7.7	22.0	2.2	5.5
Balance	67.1	71.5	68.7	88.7	92.0
Solvency (%)**	-36,4	-36,4	-40,2	-1,2	-3,6
Liquidity (%)***	73,1	102,8	44,3	69,3	79,3
Revenue	96.2	84.6	78.1	79.1	75.6
(%)	13.7	8.3	-1.2	4.6	-
Result	1.6	1.6	-26.6	1.4	5.5

* Liabilities include the difference between depreciation and maintenance, which is not listed in the table.
** Net assets/Balance
*** Current assets/Current liabilities

⁵⁷ IJsselmeerziekenhuizen (2007-2010).

Table A.4 Three banks and governments are the largest long-term creditors of IJsselmeerziekenhuizen in 2010⁵⁸

	Year	Type of loan	Duration (years)	Amount (million euro)	Residue in Dec 2010 (m euro)	Interest rate	Guarantee
BNG	2000	normal	11-36	19.0	9.2	3.5-5.5%	WfZ
NWB	2002	normal	12	5.5	2.2	5.2%	WfZ
ING	2006	normal	8-18	23.5	17.6	app. 4%	mortgage
	2008	normal	12	6.0	6.0	5%	mortgage
Municipalities	2006	subordinated	10-15	6.0	6.0	4.4%	mortgage
	2009	subordinated	5	4.0	4.0	5.5%	mortgage
VWS	2009	subordinated	4	14.5	14.5	6.2%	mortgage
MC Groep	2009	subordinated	10	5.0	5.0	7%	mortgage

9.3 Orbis MZ: overinvestments in quality and capacity⁵⁹

- History: Orbis Medisch en Zorgconcern (Orbis MZ) in Sittard-Geleen is a high quality newly built hospital. In the beginning of 2009, after a few months of operation, it reported financial distress.
- Reasons for financial trouble: high value investments and unrealistic forecasts about how to recoup these investments. Factors contributing to high costs and low revenue: financial crisis and overcapacity. Presumably, anticipated integrated funding also had an effect.
- External remedies: In the end of 2009, Orbis MZ received a 100-million-euro mortgage each from ABN Amro and Deutsche Bank with the guarantee of local municipalities. Previously, Orbis MZ received a public loan to demolish its old facilities.
- Internal remedies: As a part of its reorganization plan, Orbis MZ started cost-cutting by discharging around 700. It changed its management and extended its supervisory board with one, up to eight members. After reorganization, Orbis MZ continued to face losses, mainly due to the building costs.

⁵⁸ IJsselmeerziekenhuizen (2007-2010).

⁵⁹ Source: newspaper articles, www.orbisconcern.nl, Orbis Medisch en Zorgconcern (2009, 2010).

Table A.5 Orbis MZ makes losses after reorganization (balance in million euro)⁶⁰

	2010	2009	2008	2007	2006(a)
Fixed assets	441.8	477.9	478.7	344.4	251.3
Current assets	109.1	67.1	49.3	36.3	41.6
Net assets	-12.4	-9.5	9.8	33.1	18.6
Subordinated debt	-	-	-	-	-
Long-term liabilities	242	244.6	257.2	51.4	54.9
Current liabilities	306.7	283.8	238.1	287.0	172.9
Provision	14.4	26.0	22.9	8.3	5.9
Balance	550.9	544.2	528.0	380.7	292.9
Solvency %(b)	-2,3	-1,7	1,9	8,7	6,4
Liquidity %(c)	35,6	23,6	20,7	12,6	24,1
Revenue	321.1	299.8	284.3	273.1	231.7
(%)	7.1	5.4	4.1	17.9	-
Result	-2.9	-19.8	-23.3	3.3	1.4

(a) Liabilities include the difference between depreciation and maintenance and the financial surplus, which are not listed in the table.
(b) Net assets/Balance
(c) Current assets/Current liabilities

⁶⁰ Orbis Medisch en Zorgconcern (2007-2010).

Table A.6 Two banks - Deutsche Bank and ABN Amro - are the largest long-term creditors of Orbis MZ in 2010⁶¹

	Year	Type of loan	Duration (years)	Amount (million euro)	Residue in Dec 2010 (m euro)	Interest rate	Guarantee
Deutsche Bank	2008	mortgage	20	10.0	9.0	6.2%	mortgage
	2008	mortgage	30	90.0	90.0	6.4%	mortgage
ABN Amro	2008	mortgage	20	10.0	9.0	6.2%	mortgage
	2008	mortgage	30	90.0	90.0	6.4%	mortgage
Rabobank	1991	mortgage	20	4.5	0.2	3.5%	mortgage
	1998/2000	mortgage	25	1.5	0.9	5.1%	municipality
	2001	mortgage	20-30	30.0	19.5	5.1%	mortgage
BNG	1998	mortgage	25	5.8	3.9	5%	municipality
	2001	mortgage	40	2.2	1.0	5.6%	municipality
	2002	mortgage	20	12.0	9.2	5.2%	mortgage
	2004	mortgage	8	7.7	1.2	3.5%	mortgage
	2005	mortgage	23	8.0	1.2	3.8%	mortgage
Municipality of Sittard-Geleen	2010	mortgage	n.a.	1.5	1.5	6.5%	mortgage

⁶¹ Orbis Medisch en Zorgconcern (2010).