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# Managed Competition: Revisiting Enthoven's Principles

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## Abstract

The term “managed competition” was coined by Alain C. Enthoven in many of his early writings as a response to America’s ailing healthcare system. The idea evolved from its conception as a means of regulation to a much more active and “intelligent” management of the healthcare market by what he calls a “sponsor”. Scholars have identified the manifestation of managed competition in other jurisdictions, which adhere to some of Enthoven’s principles but might deviate from others, especially in the characterisation of the sponsor’s role. In this piece, we revisit Enthoven’s principles and propose a broader definition of the concept of managed competition in order that it may encompass other countries’ experiences that do not conform to a strict application of Enthoven’s concept. In the application of this concept in these health systems, there are certain limitations which have also been discussed in the paper.

Dvara Research Working Paper Series No. WP-2021-07  
November 2021  
Version 2.0

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# 1 The Emergence of Managed Care

Enthoven conceptualises managed competition in the context of managed care entities and emphasises their existence as a pre-requisite for such a competitive environment to yield favourable quality and efficiency outcomes. The market, thus created by the sponsor, is one of competing managed care entities. Hence, before delving into the principles of managed competition, it is necessary to discuss the managed care model and its merits.

The traditional health insurance system in the United States (US) provided free choice of doctors who were paid on a fee-for-service (FFS) basis<sup>1</sup> and were usually solo practitioners. The insurers acted as remote third-party payers who would reimburse patients for their medical bills (Enthoven, 1988). Called the “guild free choice” model, it provided significant advantage to the providers as they decided the course of treatment/s and the pricing of the same. Since the fees were negotiated by the doctors directly with the patients, the information asymmetry inherent in this interaction allowed provider-induced moral hazard to play out.

While the guild free choice model dominated the healthcare system, the multispecialty group practices pioneered managed care by providing plans that included prepayment and “limited provider” choice in the 1920s. Enthoven drew attention to the managed care organisations (MCOs) which were emerging in the market, for instance, health maintenance organisations (HMOs) and preferred provider insurance (PPI) plans (Enthoven, 1988). In such organisations, the insurers would contract providers into a network to provide care to their insured, a process called selective contracting (van den Broek-Altenburg & Atherly, 2020). The integration between the insurer/purchaser and providers facilitates an alignment of incentives. The degree of integration is determined by the nature of the contracts with providers which can be exclusive (e.g., HMOs) or non-exclusive (PPIs) (Ashraf, 2020). Nevertheless, selective contracting with provider networks increased the insurer’s say in the coordination of care across the spectrum and in the terms of provider payment. The model also shifts the payment mechanism from the traditional FFS for each service to an annual premium amount<sup>2</sup> for such integrated health plans providing insurance cover and healthcare (Enthoven, 1993).

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<sup>1</sup>The fee-for-service (FFS) model pays physicians based on the number of services or procedures provided to patients.

<sup>2</sup>Employing annual premiums is one of the necessary conditions of managed competition as it removes the perverse incentives associated with payments for each healthcare service provided (FFS). Later in the paper, we acknowledge that the payment mechanism by the insurers to the providers might however still rely on FFS payments leading to rising costs.

The core principles of managed care are the monitoring and coordination of care (primary through tertiary care), an emphasis on prevention, the provision of appropriate care, and the alignment of incentives between purchasers/insurers and providers (Sekhri, 2000). In essence, managed care seeks to burden providers with some part of the risk of insurance, and introduce gatekeeping, so as to address moral hazard of both the providers as well as the consumers. In this piece, we argue that these functions can be performed by different actors in the health system, or even through regulation, in the absence of complete integration of the purchaser and the provider.

## 2 The Principles of Managed Competition

While MCOs addressed many of the flaws of the traditional FFS system, integrated entities could still compete to produce undesirable outcomes. Such market failure can occur through risk selection, product differentiation, discontinuity of coverage and entry barriers (Enthoven, 1988). To counter such tendencies of the market to fail, Enthoven emphasised the need to “manage” the market. He described managed competition as a purchasing strategy by the sponsor that leverages the mechanism of price competition to ensure efficiency and quality in the health-care system (Enthoven, 1993). The strategy involves purchasing healthcare from a variety of plans on behalf of a group of people and then allowing individuals to choose which plan they’d like to opt for. Enthoven clarifies that price competition does not limit its scope strictly to price, but also includes quality and product features as factors influencing the customer’s choice. He, therefore, prefers to use the phrase “value-for-money” competition (Enthoven, 1993). The sponsor “manages” the market of competing managed care entities by performing the following broad functions:

1. Establishing rules of equity in the market.
2. Selecting the participating plans to control quality standards.
3. Managing enrolment process.
4. Creating price elastic demand.
5. Managing risk selection.

In the next section, we take up these functions in more detail, along with examples of their application in different health systems.

### **3 The Application of Enthoven's Principles in Different Contexts**

Written in the United States' context, Enthoven's early works are mainly concerned with the challenges faced by the American healthcare system in terms of rising costs and poor health outcomes. Consequently, the theory of managed competition that he posits, is mainly composed of a set of principles to address these challenges and is rooted in the conception of the sponsor as the employer, or a group of employers as seen in many states of the US. Enthoven does, however, observe that the sponsor could also be welfare trusts, Health Care Financing Administrations (HCFA), and state governments (Enthoven, 1988). We will argue that managed competition models can also exist at the national scale, as in the case of the social health insurance systems in the Netherlands, Israel, Germany and Switzerland (Table 1). To encompass such cases, we need to broaden the definition of managed competition to make fluid the characterisation of actors in the market environment while keeping the core principles intact and cardinal. What is common across the health systems in these jurisdictions is the role of the sponsor being assumed by the government or a public body. While the characteristics of the systems could vary, they embody most of the core principles of managed competition. The competing entities could be sickness funds (as in Germany and Israel) or private insurers with varying levels of contracting with providers (as in Switzerland and the Netherlands). For clarity, we hereon use the term health plans to refer to integrated entities in the market.

The functions of the sponsor as outlined by Enthoven are observed in these health systems in different forms. We reflect on each of those functions and their application in the health systems under study.

#### **3.1 Establishing rules of equity**

The principle of equity in healthcare envisions universal access to healthcare in terms of both affordability of care and entitlement to the same basket of care. Social health insurance systems provide universal health coverage to their citizens by addressing the affordability aspect through income-based contributions or community rating. While Israel and Germany use mandatory contributions, Switzerland has employed community rating wherein individuals in a region pay the same premium regardless of age, sex, and pre-existing diseases. Netherlands uses community rating partially, wherein 50% of the premium is community-rated, while the other half is income based (see Table 1). All systems use subsidies to cover those who cannot pay for themselves (e.g., unemployed and elderly members). Standard-

ised benefit packages and the mandate to offer them to all consumers ensure equity in access to the same services. However, there also exist voluntary health insurance options in these countries as supplemental markets providing add-on services for care not covered by the social health insurance package. Moreover, members can opt-out of the mandatory SHI system in Germany if they cross the income threshold or belong to certain professional groups (civil servants and self-employed) and choose voluntary health insurance instead (Blümel et al., 2020).

### **3.2 Selecting participating plans**

According to this principle, the sponsor is tasked with choosing plans in the market on behalf of the consumers (Enthoven, 1993). While the government puts in place regulations to ensure that standards of care are met, it does not actively select plans for its population. Instead, some health systems provide public information on the performance of health plans for consumers to exercise informed choices. In the Netherlands, the government provides information on the quality and price of care provided by different health plans (van Ginneken et al., 2011). Scholars have noted the absence of such quality information to consumers in Israel (van de Ven, 2016) and Switzerland (De Pietro et al., 2015) as a drawback in these health systems. The nature of information and the recipients of the same are also important considerations in managed competition. For one, access to performance related information on providers and insurers is important for consumers to make informed choices. The Netherlands makes both available to the Social Health Insurance (SHI) system members, while Germany provides information solely on the hospital quality through the websites of both the government and the insurers (Shmueli et al., 2015). The other aspect of information availability is its use by insurers to assess providers in the market, thereby aiding the process of selective contracting and inducing competition among providers (Shmueli et al., 2015). Such information is provided to insurers (in addition to consumers) in the Netherlands alone. However, the lack of robust quality indicators limits insurers' ability to assess provider performance even in this case. The other gap in this regard is that between the information needs of patients and the information made available by the system in the Netherlands (van Ginneken et al., 2011). The health exchanges in Netherlands and Switzerland also struggle with making such information easily understandable by consumers (van Ginneken et al., 2013). The availability of such quality information would also need to be supported by comprehensive data systems.

### **3.3 Managing enrollment process**

Enthoven stresses the importance of active management of the enrolment process to ensure acceptance of all members by health plans and allowance of switching between plans (Enthoven, 1993). Such provisions are necessary for universal coverage as well as to ensure competition among the plans. In the social health insurance systems under consideration, the sponsor does not actively manage this enrolment process but uses other means to ensure that the desired objectives are met. While the universal acceptance of individuals is ensured under the rules of equity set by the government, switching between plans is another feature provided as an option to members at different points in the year. Members are allowed to switch plans twice a year in Israel (Rosen et al., 2015) and Switzerland De Pietro et al. (2015), once in 18 months in Germany (Blümel et al., 2020), and once every year in the Netherlands (Kroneman et al., 2016). The provision of switching among plans is intended to act as an incentive for insurers to provide good service quality, reduced prices and a good provider network. Hence, regulations are established at the system level for customer protection, whereas a typical sponsor (like an employer in the US) would be actively involved in the enrolment of all his/her employees and monitoring of the plans they are subscribed to.

### **3.4 Creating price elastic demand**

The purpose of the sponsor is to create price elastic demand so that health plans are incentivised to cut prices to gain market share from the competition (Enthoven, 1993). Enthoven describes the sponsor's role in this regard in terms of limited sponsor contributions, standard benefits package, providing quality information to consumers to make informed choices, individual choice of plans, and disincentivising risk selection (Enthoven, 1993). We have looked at the features of standard benefits packages and risk adjustment (to disincentivise risk selection) in terms of setting conditions of equity in the market. Limiting sponsor contributions is required to provide enough gap between it and the price of the lowest-priced plan so that there is price competition.<sup>3</sup> In the contexts we have considered, instead of pure price competition, health plans compete with one another for members and are hence motivated to provide better quality care for the same price. Choice of plans by individuals and providing quality-related information are important features enabling an environment where plans compete for well-informed customers. This feature resonates with the "value-for-money" competition envisioned by Enthoven.

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<sup>3</sup>Providing a flat payment as sponsor contributions incentivises members to choose plans based on prices. In cases where they receive a percentage as contribution, this incentive is diluted affecting the level of price competition for health plans in the market.



### **3.5 Managing risk selection**

Since the absence of risk rating can induce risk selection by insurers, the governments in these jurisdictions mandate entities to accept all applicants. Further, risk adjustment in these health systems through capitated funds aims to compensate health plans for the additional risk they take on. The risk adjustment scheme was initiated based on factors of age and sex which would make some individuals “bad risks” for insurers leading to their exclusion from the system. It was realised later that these factors were insufficient to counter risk selection, necessitating the introduction of health risk-based adjustment taking into account the susceptibility to health shocks. Switzerland, for instance, considers previous hospitalisation events and expenditure on medicines to determine the risk adjustment to be provided to health plans (De Pietro et al., 2015). The health systems in Germany and the Netherlands rely on a morbidity-based risk adjustment scheme (Blümel et al., 2020), and risk-adjustment for the health risk profiles (Kroneman et al., 2016), respectively. Israel continues to use an age-based risk adjustment but has recently incorporated sex and region as factors requiring adjustment (Rosen et al., 2015) and is yet to incorporate risk profiles as a comprehensive measure to prevent risk selection.

Hence, the principles of managed competition have been adopted by all the health systems in consideration, albeit through regulations, with the government or a public body acting as the sponsor. In such cases, the management of the competitive environment by the sponsor i.e. the government/public body primarily entails the establishment of rules of equity, creation of price elastic demand, and management of risk selection. The active selection of plans in the market, on behalf of people as well as the enrolment process, is largely found to be absent in such systems indicating a passive role of the sponsor in this regard. Nevertheless, as seen above, providing information to consumers and instituting regulations serves the purpose of meeting the goals of managed competition. In this regard, the Netherlands and Germany are more active in the dissemination of information while the regulation of plans is more active in the Netherlands and Switzerland through public bodies acting as sponsors in these systems (see Table 1).

Table 1: Countries with Managed Competition

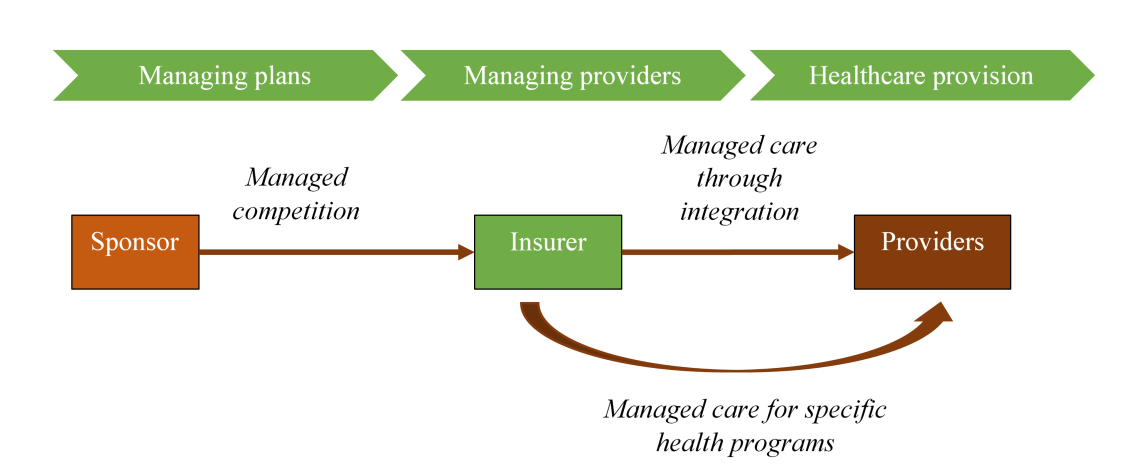
	<b>The Netherlands (Social Health Insurance system)</b>	<b>Switzerland (Mandatory Health Insurance system)</b>	<b>Germany (Statutory Health Insurance system)</b>	<b>Israel (National Health Insurance system)</b>
<b>Insurer</b>	Private insurers	Private insurers	Sickness funds	Sickness funds
<b>Provider</b>	Hospitals, physicians, & specialists are independent.	Cantonal hospital associations; Provider-payer associations	Regional association of physicians, Public hospital system	Provider networks
<b>Managed care</b>	Insurers negotiate contracts with independent providers & hospitals. Selective contracting with specialists.	Insurance plans with some restrictions of choice of provider.	Limited selective contracting seen in add-on programs (for instance, a diabetes management program).	Exists with ownership or contracts with providers.
<b>Sponsor/active or passive role</b>	Dutch Health Care Authority/active	Federal Office of Public Health/active	Federal Ministry of Health & Federal Social Security Office/passive	National Insurance Institute/passive
<b>Payment to hospitals</b>	Diagnosis-related group (DRG)	Fee schedules (ambulatory care) & DRG (acute care)	DRG	Procedure-related group (PRG)
<b>Payment to physicians</b>	Combination of FFS, capitation, & pay for performance (P4P)	FFS	FFS	Capitation
<b>Community rating</b>	50% community-rated; 50% income-dependent	Yes, but premiums differ on age classes.	No, income-dependent (flat wage tax rate)	No, income-dependent (health tax)

## 4 The Essence of Managed Competition

As summarised in the previous section, the role of the sponsor and the associated functions are performed by a public body that is itself the government or acting on its behalf. As has also been noted, the form the sponsor's "management" takes is usually that of regulatory norms. The achievement of the objectives of managed competition can also be facilitated through negotiations at the regional/national level between provider and insurer groups instead of selective contracts between individual insurers and providers. Such an arrangement is observed in Germany with limited use of selective contracting mainly for the purpose of coordination of healthcare (Nambiar, 2021). The limited presence of such selective contracting in the German SHI system is the first sign of integration of not only care across levels but also integrated purchaser-provider networks in the market. In such systems, plans have the freedom to decide payment methods unlike the national level arrangement in the SHI system. While plans have experimented with pay-for-performance, capitation and FFS models of payment, the emergence of the former two as the dominant methods (to move away from traditional FFS payments) would be dependent on negotiations and bargaining between the insurers and providers. Not only Germany, but also the systems of the Netherlands and Switzerland employ FFS as the payment method for physicians (see Table 1). While this can be a drawback, the use of DRG payments for hospital care is an advanced form of FFS wherein the hospitals get paid a fixed cost for the treatment of the disease instead of each service provided in the treatment (Roberts et al., 2008). The insurers in the Netherlands and Switzerland also negotiate with providers on the fee schedules (for FFS) and budget ceilings to control costs (De Pietro et al., 2015; Kroneman et al., 2016).

Apart from the functions of managed competition being performed by the government as the sponsor, the functions of managed care in social health insurance settings could also be introduced by the government or a public body through particular programs (see Figure 1). Such a broader role of the sponsor is possible considering the common objectives of efficiency and equity in managed care and managed competition. In managed care models, the insurer contracts with providers and endeavours to create coordination, integration and the right incentives for efficiency and quality in healthcare provision. In the health systems of Germany and Switzerland, selective contracting is limited to specific health programs, either with add-on programs (in the former) or with specialist care (in the latter). However, the function being performed here is that of integration and coordination through regulations. Hence, the sponsor creates an environment where the principles of managed care are promoted through regulation despite the absence of integrated entities.

Figure 1: Manifestation of Managed Competition



Regardless of a public/private sponsor and the kind of integration, it is essential to align incentives between the purchasers and the providers in the market. This is also vital for managed competition to manifest wherein cost and quality metrics become the areas of differentiation from their competition (Shmueli et al., 2015).

Where the sponsor performs functions of managed care by creating incentives for providers, such regulation would likely be passive, as is seen in many social health insurance contexts. While we can broaden the role of the sponsor and increase the scale (national), the active “management” of the competitive environment is the prerequisite, which seems to be amiss in such systems. Nevertheless, there are examples within the US context itself wherein the manifestation of managed competition took a different form than what was envisioned. In the state of California, instead of competition between HMO (health maintenance organisation) units, Enthoven observes the presence of HMO carriers that contract with multiple hospital networks (Enthoven & Singer, 1996). Hence, the application of the principles of managed competition can take different forms depending on the contextual features and the role of the regulator in the health system.

## 5 Limitations of Managed Competition

The application of these principles of managed competition have taken various forms and have faced limitations in the process in terms of ensuring equity and efficiency. The empirical literature on the performance of these systems highlights some of these challenges:

### 5.1 Imperfect Risk Adjustment and the Persistence of Risk Selection

The risk adjustment mechanisms in these systems have gradually evolved and improved through multiple reforms. However, there continue to be imperfections in this mechanism, leaving the possibility of risk selection. The SHI system of Germany has encountered the issue of risk selection on the basis of region and recently added a regional component in the risk adjustment mechanism to account for the same (Blümel et al., 2020). Insurers in the Netherlands have admitted their reluctance in making quality improvements for high-risk customers (e.g., chronically ill patients) due to insufficient risk adjustment they received (van Kleef et al., 2018). The sickness funds in Israel employ marketing strategies to attract profitable customers<sup>4</sup> as a sort of ex-ante risk selection (Brammli-Greenberg et al., 2018). In Switzerland, the lack of data collection regarding risk selection incentives and actions is a limitation. However, studies provide anecdotal evidence on the use of misinformation to mislead members, slow processing of applications, and longer waiting times as some means of risk selection (Schmid et al., 2018). This is also reflected in studies conducted on the system in the Netherlands (van Kleef et al., 2018).

The reason for risk selection in the systems in Israel, Netherlands and Germany is that the imperfect risk adjustment tends to under-compensate insurers for high-risk members and over-compensate them for low-risk members (Brammli-Greenberg et al., 2018; van Kleef et al., 2018; Wasem et al., 2018). As a result, insurers have been concentrating on retaining over-compensated members and discouraging enrolment of under-compensated members by skimping on the quality of care provided to the latter. This is called service distortion and acts as the ex-post risk selection mechanism since insurers cannot reject applicants beforehand.

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<sup>4</sup>The profitable customers are those with either low health risk or those belonging to groups/categories which are over-compensated by the risk adjustment scheme.

## 5.2 The Low Switching Rates in the Market

The switching behaviour of consumers is an indicator of the level of competition in the market between insurers. Low rates of switching take away the incentive to insurers to retain consumers by cutting the cost of the plan as well as providing good quality services. This rate of switching or consumer mobility is dependent on some behavioural barriers like status quo bias as well as the costs incurred by members while switching plans. These could be in terms of transaction costs (time and effort of switching), learning costs about new rules, benefit lost with the previous insurer, change in provider, perception of sunk cost and the uncertainty around the new plan (Duijmelinck et al., 2015). Moreover, lower plan mobility particularly among high health risk members might be an indication of a weak risk adjustment mechanism (Thomson et al., 2013). High risk members are incentivised to continue with their existing health plans due to the differential cost associated with switching, especially because their membership is associated with higher costs. This mechanism, termed adverse retention (Altman et al., 1998), can lead to insurers underproviding care to their existing high risk members to save costs (Strombom et al., 2002).

In Netherlands, switching of plans by consumers peaked significantly in 2006 and then dropped drastically by 2009 from 20% to just 4% (Beest et al., 2012). This change is attributed to the enactment of the Health Insurance Act in 2006, a major reform which reduced the share of income related premium in total health expenditure from 80% to 50%, implying an increase in premium amount for all consumers in the system (Douven et al., 2017). The period right after the 2006 law created the incentive of a high financial gain with switching of plans to save on the increased premium cost. Similar increases in switching rates were observed in Germany and Switzerland immediately following the reforms which introduced free choice of insurers in their respective health systems (Laske-Aldershof et al., 2004).

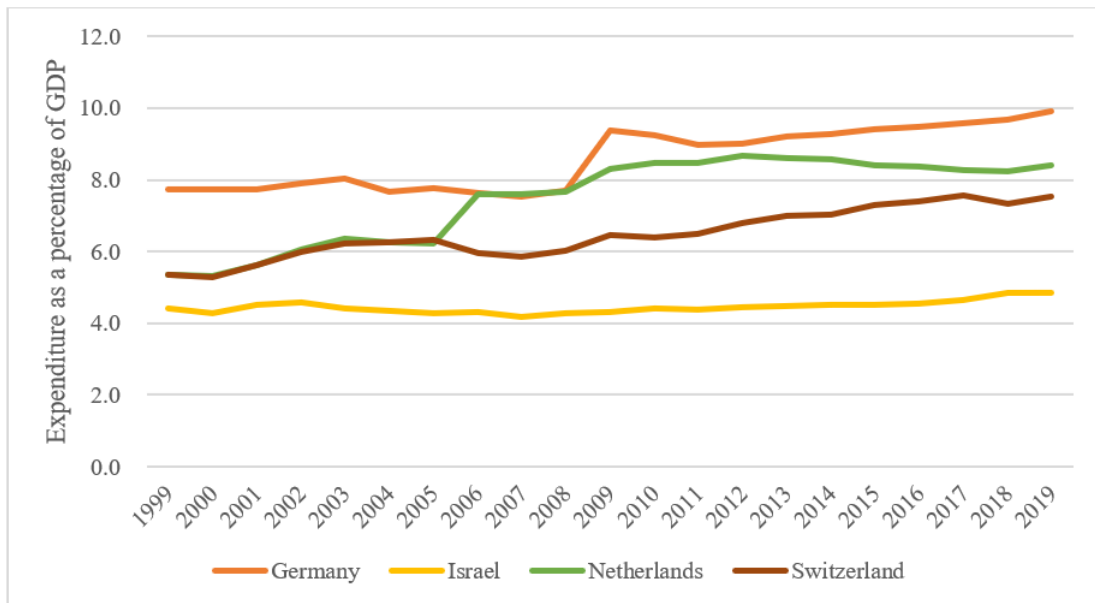
Over the period of 2006-2015, the gains reduced and stabilised leading to the sharp reduction in switchers between 4-8% per year in the Netherlands (Douven et al., 2017). The switchers in the Netherlands are dominated by the young population in the country (Duijmelinck & van de Ven, 2016). In Germany, studies have found that those who switched plans are usually younger, healthier and have lower health costs (Pilny et al., 2017). In Israel, each year only 1-2% of the population switches plans, and it is more common in lower income individuals (Brammli-Greenberg et al., 2018). Since the poor population in Israel tend to have large families, insurers find them attractive as consumers and compete aggressively for the generous risk adjustment they receive for enrolling children (Brammli-Greenberg et al., 2018).

There is a lack of recent data on the switching rates in Switzerland. However, low switching rates were reported between 1997 and 2000, which ranged from 2.1% to 4.8% (Leu et al., 2009). These reports indicate that low switching behaviour might be linked to the insufficient risk adjustment offered to insurers. Scholars have also pointed to the need for increasing the choice of insurers in the health systems for consumers so they can choose the plan where the switching benefit is more than the switching cost (Duijmelinck et al., 2015; Duijmelinck & van de Ven, 2016). This would be instrumental in increasing switching behaviour and promoting competition among plans.

### 5.3 The Limited Extent of Cost Containment

The extent of cost control in some of these systems is debatable. Apart from Israel, all the countries considered in this paper have high health expenditure from government sources and compulsory insurance as a percentage of GDP (see Figure 2). There is a gradual increase in healthcare spending with a slight uptick following the year 2007.

Figure 2: Trends in government funding and compulsory insurance expenditure in the four countries

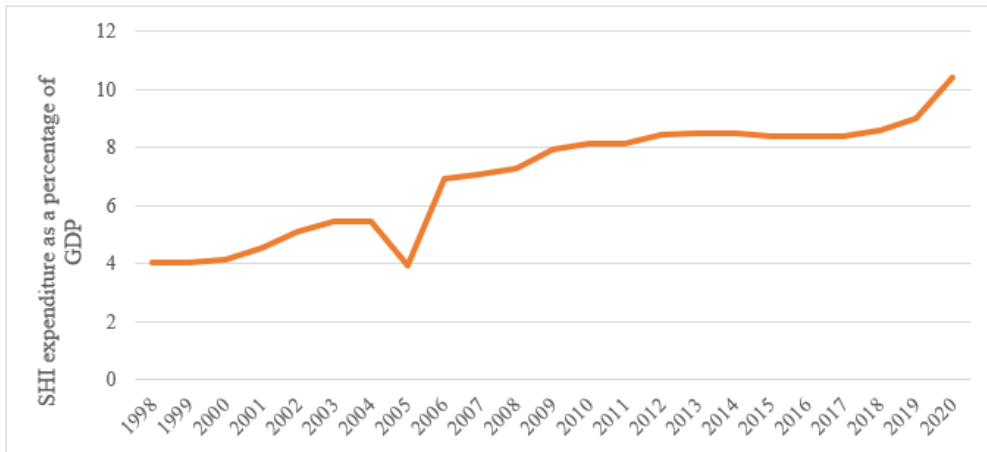


Source: Illustration by author using OECD Health Expenditure Indicators (OECD, 2014)

While the reforms in the Netherlands brought about constrained prices of health-

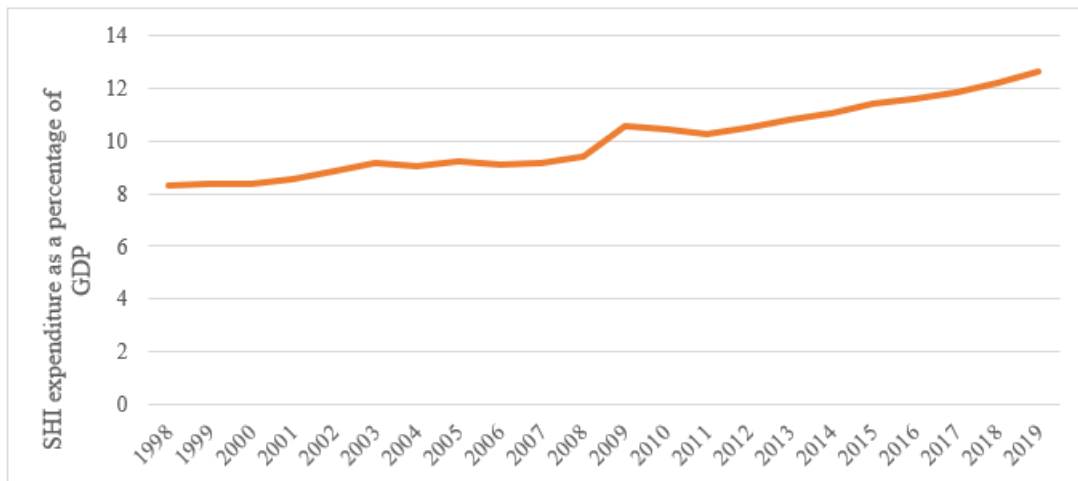
care services, healthcare spending increased regardless with increase in the volume of services being provided (Schut et al., 2013). Figures 3 and 4 indicate the steadily increasing trend in expenditure particularly for the systems in consideration in the Netherlands and Germany.

Figure 3: Change in expenditure on government funding and premium funding for health insurance in the Netherlands



Source: Illustration by author using data from Statline, the database of Statistics Netherlands (CBS Statline, 2022)

Figure 4: Change in statutory health insurance expenditure in Germany



Source: Illustration by author using data published by The Federal Statistical Office, Germany (Federal Statistical Office Germany, 2022)



The year-on-year increase in health spending in these health systems indicates a modest level of cost control. The reasons for the same can be multiple, however they point to the limitation of managed competition in these systems being able to produce enhanced efficiency and cost control.

## **6 Conclusion**

The essence of Enthoven's idea of managed competition revolves around a balanced use of regulation to steer market forces towards the goals of efficiency and equity. Social health insurance systems exhibit these intentions through similar tools to manage the market. While functionally defining both managed care and managed competition lets us arrive at a broader understanding of the concepts in operation, it also carries the risk of diluting his principles or blurring the lines between indemnity and managed care. Hence, it is important to adhere to the principle of risk-sharing not only with the insurers but the providers as well, to move the burden away from the individuals. In such an endeavour, entities with some form of integration (multiple possible configurations) overseen by a sponsor or "manager" would be a viable pathway to customer-centric health systems. It is also evident that with the sponsor's role being assumed by the government, strong institutional capacity and regulatory will is required to steer the market towards favourable outcomes for the consumers. Moreover, limitations in these health systems have been observed in terms of the implementation of Enthoven's principles. These need to be addressed through better risk adjustment schemes and by providing quality and performance related information to the population to inform consumer choices and promote competition in the system.

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