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Output 3: Creating a competitive market for employment services in Sweden

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Executive Summary

The Swedish authorities are in the process of enacting a major reform of their publicly-funded employment services. The reform will result in the contracting-out of a significant amount of employment services to independent providers in a quasi-market structure. It will also will shift the focus of the Swedish Public Employment Service (PES), Arbetsförmedlingen, towards monitoring of providers and working with different stakeholders in guiding and implementing labour market policy. The reform will build on lessons learned from the implementation of the programmes *Kundval Stöd och Matchning* (STOM), which ran from 2014 to 2021, and *Kundval Rusta och Matcha* (KROM), which by the end of 2021 had replaced STOM in all municipalities in Sweden.

The aim of this report is to examine how theoretical and empirical findings on quasi-markets can help inform the Swedish reform. It is based on desk-research of relevant academic literature on competition, and it reflects consultations with stakeholders in Sweden as well as experts from other countries with experience in contracted-out employment services.

Two key findings emerge from the study of the effects of competition:

- **Increasing the number of providers does not automatically unleash competitive forces that improve services and employment outcomes**. Conceivably, an employment services market with many providers where clients do not make a conscious choice of provider but are allocated their closest provider can lead to a "race to the bottom", with providers competing only to open as many locations as possible to attract clients. Nevertheless, in a number of contexts that are broadly comparable to employment services, such as health and education, empirical studies have generally found a positive link between the number of service providers and outcomes. But there are also instances where the increase of the number of providers resulted in a *decrease* in the quality of services for those services which were not publicly reported. This highlights the need for allowing a sufficiently diverse set of providers but at the same time, carefully monitoring the market by examining a wide array of outcomes and indicators.

- **Having jobseekers make an informed and deliberate choice of provider serves two crucial purposes**. *First*, it directly improves employment outcomes of the jobseeker making the choice. Such an arrangement provides jobseekers with more tailored support that better reflects their specific needs, thus improving the quality of the match between the provider and the jobseeker. Moreover, the act of making a choice, in itself, has been shown to improve motivation and effort in other contexts – effects that can be extremely important for individuals experiencing unemployment. *Second*, having jobseekers make an informed choice may have indirect effects on the effectiveness of the employment services market, thereby improving outcomes for jobseekers in general. Offering jobseekers a choice is a key mechanism for unleashing competitive pressures, which in turn results in a market with higher-quality services and outcomes. In contrast, under random matching – or if large number of jobseekers are assigned their closest provider – providers do not have strong intrinsic incentives to attract jobseekers because each provider will likely receive a certain share of jobseekers in a given region and, in addition, the assigned jobseekers cannot easily walk-away to competing providers.

Based on these findings, the Swedish authorities should:

- **Invest resources to ensure that jobseekers make a conscious, informed choice of provider.** For some jobseekers, accessing online information about providers, above all, their relative performance (via Star Ratings or other key performance indicators), may be sufficient to make an informed choice. For many others, having dedicated, specialist Arbetsförmedlingen counsellors can play an important role. This is based on the experience of Sweden as well as other countries,

including Belgium and the Netherlands, where a sizable share of jobseekers have a difficulty making a choice of provider.

- **Impose caps on the market share of poorly-performing providers if necessary.** If large numbers of jobseekers do not exercise their right to make a choice of provider but are allocated one based on distance, poorly-performing providers may not be subject to the disciplining effects of competitive pressures. This could lead to a poor quality of services in the market.

- **Minimise the costs of switching providers**. The competitive forces which lead to improvement of services are stronger if jobseekers can switch providers relatively easily – or even if there is a credible threat that they can do so. Many jobseekers may learn that their chosen provider is not the best fit for them only after several sessions with their providers. Some may be able to resolve issues that may arise, aided by the existence of a credible threat of switching to another provider. Minimising switching costs may entail making the procedures for switching straightforward and accessible for the jobseeker, as well as by facilitating a seamless transition process, such as by ensuring the portability of information – with the jobseeker's consent – from one provider to another.

- **Consider various options to ensure service coverage in otherwise unviable service areas** (for example, lower client-density areas)**.** One option is to include additional payments to providers operating in less densely-populated areas, with the level of payments possibly determined through an auction mechanism. Another option is substituting minimum service requirements, such as mandated office hours, with mobile units or on-site visits. Yet another concerns bundling service areas together, in effect cross-subsidising service provision across areas.

Creating a well-performing, competitive market for publicly-funded employment services is a complex task. Sweden's existing services already reflect broad inroads into the development of such a market. However, some aspects are difficult to fully appreciate in advance: the process will invariably involve learning-by-doing. Fully reaping the benefits of a competitive market requires careful consideration of the theoretical and implementation aspects discussed in the report.

1. Background on reform and role of competition

In May 2019, the Swedish government commissioned the Swedish Public Employment Service (PES), *Arbetsförmedlingen*, to prepare for a major reform of publicly funded employment services in Sweden. The proposed reform will result in the contracting-out of a significant amount of employment services to independent providers in a quasi-market structure and will shift the focus of *Arbetsförmedlingen's* mandate towards monitoring of providers and working with different stakeholders in guiding and implementing labour market policy. The reform will build on lessons learned from the implementation of the programmes *Kundval Stöd och Matchning (STOM)*, which ran from 2014 to 2021, and *Kundval Rusta och Matcha (KROM)* which by the end of 2021 had replaced STOM in all municipalities in Sweden (Langenbucher and Vodopivec, 2022[3]).[1] The reform aims to improve the quality of services and the satisfaction of clients by diversifying the service offer and focusing service provision more on employability and skills development.

While the reform is still in its making, indications on key elements have come from consultations with various stakeholders as well as the government reform proposal from September 2021 (Ministry of Employment, 2021[2]).

- **Target groups:** The new system is planned to provide contracted-out services for the "middle group" of jobseekers who are neither very close to nor very far away from the labour market. Clients are to be given the opportunity to influence the choice of provider as much as possible and providers cannot refuse to accept certain jobseekers (OECD, 2022[3]). Jobseekers closest to the labour market will be supported by *Arbetsförmedlingen* mainly through digital services. Details on which jobseekers will continue to be served also through face-to-face services by *Arbetsförmedlingen* and what services those furthest away from the labour market will receive are still to be defined.

- **Payment model:** Providers are to be given strong financial incentives for sustained employment or education outcomes and the prices paid to providers are to be differentiated based on a client's employability in order to ensure providers do not focus their attention on only e.g. the most readily employable clients. In the ongoing KROM programme, the payment model consists of three different payment types: a basic payment paid as a daily allowance, a performance compensation paid for employment or education/training outcome and a speed premium paid for work employment or education outcomes achieved before the end of the attachment period (OECD, 2022[3]).

- **Selection of providers:** Providers applying for contracts in one or more of the 72 delivery areas must meet a number of criteria. These include financial and organisational requirements as well as qualitative criteria. In the KROM programme, qualitative criteria include providers' experience in providing similar types of services, the qualification of their staff and their physical presence. In

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[1] KROM differs from its predecessor in a number of ways, such as determination of jobseekers into the programme through a statistical profiling tool, an (average) increase in jobseekers' distance to the labour market, a longer cap on the duration in the programme (12 months in KROM versus 9 months in STOM), greater freedom to providers in designing services, and a payment scheme with more weight on outcome-based fees.

addition, providers must maintain a physical presence (in-person office hours) in each service area for at least 16 hours per week. Thus, although the payment model in to be focussed on outcomes, other requirements that are not output-focused will also play a role in the selection of providers (OECD, 2022[3]).

This report focuses on one of the fundamental elements of creating a market for employment services – fostering competition. Competition is a key force that incentivizes firms to invest in product quality. This is true not only in traditional markets where firms freely set prices but also in so called *quasi-markets* where a contracting authority is the buyer of services (Grand and Bartlett, 1993[4]). Since competition is a driving force of high quality service, it is important to ensure a competitive environment in the quasi-market for employment services. This can be achieved through a number of different ways. This report discusses several ways of inducing a competitive environment.

Competition can play an important role at several steps in a jobseeker's customer journey with publicly-financed employment services. *First*, competition plays a role after the jobseeker registers with the PES and undergoes the profiling exercise if they are referred to contracted provision of services. At this point, the jobseeker must choose a provider. But the jobseeker has a real choice only if there are at least two providers in the service delivery area. The more providers there are in a given delivery area, the more likely it is that the jobseeker finds a good match. Thus, the number of providers in any given delivery area is essential for competition. Sections 2 and 3 discuss this point. *Second*, another important factor to note is the jobseeker's freedom of choosing a provider. This freedom of choice is another essential force that affects competition. We discuss this point in Section 4.1. Moreover, when choosing a provider the jobseeker needs information about different providers to be able to avoid "bad" matches and choose a "good" match. Examples of such provider-specific information include the provider's location and its service quality. How the availability of such information affects competition is discussed in Section 4.2.

Each section first addresses theoretical predictions of the relevant literature for the topic covered in the section. This approach is helpful to understand the underlying mechanisms shaping outcomes in the quasi-market. The theoretical discussion is followed by empirical findings on the topic. This helps identify which of the mechanisms from the theoretical discussion are mostly likely to be relevant in the quasi-market for employment services. Given a relative paucity of empirical evidence on the effectiveness of employment services within a client choice-based setting, the report also draws on the theoretical and empirical literature from the markets for health care and education.

2. Number of Providers and Quality

The quasi-market for employment services being developed in Sweden has two important features. *First,* potential service providers can enter into the existing quasi-market at any point in time. To contrast, note that entry into identical markets in a number of other countries is determined by a tender process which had a certain deadline, after which entry was impossible.[2] *Second*, the quasi-market in Sweden allows for multiple providers to supply services within the same municipality (there is a total of 290 municipalities).[3] Since Arbetsförmedlingen accepts entry-applications on rolling basis and multiple providers can compete within a same area, Arbetsförmedlingen can adopt policies that increase competition in traditional markets where entry (or exit) can occur at any point in time.

The starting point for analysing competition in quasi-markets for employment services comes from a related topic which is more widely studied – price competition in homogeneous goods markets. In a traditional homogeneous goods market, price is the only mechanism sellers employ to compete with their rivals in the short-run (given that the goods they sell are homogenous, or relatively indistinguishable). In a quasi- market for employment services with fixed prices, the analogous mechanism is service quality and content. While the two markets may differ in many respects, the comparison is arguably valid because neither service quality nor prices can be changed in a costless and straightforward manner. Certainly, improving service quality requires time and investment, but changing prices is also not as simple as it may seem. For example, if a clothing store wishes to change its prices, a store manager first needs to decide how much discount to offer, which is usually based on careful analysis of existing data. Next, discounts need to be incorporated into the IT system of the store. The store also needs to devote some of its personnel to update price tags. Finally, changing prices can carry reputational risks – for example, customers may routinely avoid a store which is perceived to be charging excessive prices. All of this requires substantial amount of time and resources.

2.1. Theoretical predictions: having more providers does not necessarily result in higher quality services

In the economic literature, competition is widely associated with the number of competing service providers in a given market. The traditional notion is that the higher the number of competitors, the stronger the competition. Indeed, in a market where jobseekers can freely choose providers and

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[2] Examples include Australia's *jobactive*, Belgium's pilot programme that allows jobseekers free choice of providers, Ontario's (Canada) *Employment Service Transformation,* Republic of Ireland's *JobPath,* and United Kingdom's *Work Programme* (Langenbucher and Vodopivec, 2022[1])*.*

[3] Such a practice is also employed in Italy, *assegno di ricollocazione (the Reintegration Voucher)* programme, the Republic of Korea, *National Employment Support Programme*, the Netherlands, *Open House Contracting,* New Zealand, *the Employment Placement or Assistance Initiative*, the United Kingdom, *Work Programme* and the United States, New York City, *Career Compass* and *Career Advance*. In contrast, schemes in a number of other countries awarded a single contract in a pre-specified region. Examples include France's *Private Placement Operators Scheme*, Ontario's (Canada) *Employment Service Transformation,* Republic of Ireland's *JobPath,* and the state of Wisconsin's *Wisconsin Works (W-2).*

information about service quality is easily accessible (through a website with quality ratings, as in Australia and Sweden), jobseekers are likely to select a provider with higher quality among providers that are identical in all other aspects. Therefore, if the number of providers rises, it becomes harder for each provider to attract jobseekers. As a result, each provider has an incentive to improve quality of its services in order to increase its customer base. In the extreme case where jobseekers care only about the service quality (and do not care about, say, providers' locations), the competition gets so intense already with two providers that they will offer the highest possible quality (Bertrand, 1983[5]).[4]

It must, however, be noted that **competition does not necessarily improve quality**. Theoretical studies demonstrate that, in addition to the favourable effect of competition on quality, there exist different factors detrimental to quality in a variety of markets. These detrimental effects are called indirect effects, as they affect quality indirectly through their impact on jobseekers' behaviour. As will be discussed, below, in some markets, the indirect effect of competition on quality may be so strong that overall quality may decline.

In theory, more competition may negatively affect quality if jobseekers heavily value aspects of providers other than their service quality (Varian, 1980[6]). For instance, some jobseekers may opt to choose the closest nearby provider simply to save on commuting costs. Other jobseekers may simply prefer to remain unemployed. Some others may find it too costly to learn information about quality because of, say, language barriers. Empirical evidence seems to support presence of these type of jobseekers, as around three quarters of jobseekers chose to stay with Arbetsförmedlingen in 2008 even though they had a chance to switch to private providers (Bennmarker, Grönqvist and Öckert, 2013[7]). In such cases, an increase in the number of providers has two counteracting impacts on service quality. On the one hand, providers compete fiercely for jobseekers who value service quality. This is the positive effect on quality. On the other hand, each provider has an incentive to "rip-off" jobseekers for whom quality is not the main concern, by supplying poor quality services. This is the negative effect of competition on quality. If the negative effect of entry is stronger than the positive effect, overall quality may decline with greater number of providers. Subsequent studies find this results to be robust to many extensions (see, e.g., (Stahl, 1989[8]; Janssen and Moraga-Gonzalez, 2004[9]; Moraga-Gonzalez, Sandor and Wildenbeest, 2017[10])).

Overall service quality may theoretically also decline if a greater number of providers increase the costs of finding information about providers (Atayev, 2022[11]).[5] Specifically, more competition may make it more difficult for jobseekers to understand which providers supply a relevant service and the level of quality of the services they provide. For instance, jobseekers with disabilities need to spend time to find providers that supply services tailored to their needs. Similarly, newly migrated jobseekers need to search for providers that provide language services. In such cases, an increase in the number of providers has two countervailing effects on quality. The intuitive effect is that more providers spur competition and improve quality. The negative effect is due to jobseekers' behaviour. Specifically, if it is easy to find a provider that supplies the desired service (which is true as the overall number of providers increases), jobseekers are less willing to learn information about suppliers and compare their qualities. If however jobseekers do not compare qualities across providers, the providers supply lower quality services. Interestingly this effect is stronger than the positive effect of competition on quality if the cost of finding

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[4] There is very little, if any, empirical evidence supporting this result. It is therefore a theoretical paradox. Nonetheless Bertrand's model is a foundation of a large body of literature in Microeconomics. The original study analyses price competition in homogeneous goods markets.

[5] The studies by Varian (1980[6]) and Atayev (2022[11]) are similar in many aspects, but there is an important difference between them. Whereas jobseekers' behaviour is dictated by exogenous assumptions in the former study, jobseekers are allowed to optimally adapt their behaviour to changes in the market in the latter study. Thus, jobseekers' behaviour receives great emphasis in Atayev (2022[11]).

information about providers is *small*. A similar result is reported in a study by Lauermann and Wolinsky (2021[12]) who analyse the topic from a perspective of auctions.

Finally, competition may theoretically worsen quality in markets where providers' services differ substantially from each other (Chen and Riordan, 2008[13]). Here the difference is not due to quality, but due to the so called "match value." A buyer may prefer a provider's product to that of another provider simply because the former product subjectively looks better than the latter, i.e., the former has a better match value than the latter. It may, however, be that another buyer has an opposite preference due to her own subjective tastes. For instance, in a market for automobiles some buyers favour a red car over a white car of the same brand, whereas some other buyers prefer a white car to a red one. Similarly in the quasi-market for employment services, some jobseekers value availability of language services than others. As opposed to preference on quality wherein all buyers agree that one seller's product quality is better than another seller's product quality, buyers do not need to agree on which product is better when it comes to match values.

In their model, Chen and Riordan (2008[13]) identify two opposing forces of competition in markets where buyers differ in their match values. The intuitive force is that entry intensifies competition. This force leads to better quality. The other, less intuitive, force is that buyers become less sensitive to quality improvements. This means that even if a provider invests heavily into its service quality, it will not be able to attract many jobseekers simply because some jobseekers subjectively prefer services of another provider. As a result, providers may find it beneficial to decrease quality and, thus, save the investment costs.

All discussed theoretical studies identify two opposing effects of competition on quality. They all agree on a positive intuitive effect of the number of providers on quality. However, depending on market characteristics, there may also be negative impacts of competition on quality. We discussed three different environments where unfavourable impacts of competition on quality may be present: markets where aspects of providers other than their service quality are salient for jobseekers, markets where jobseekers need to engage into costly search to find which providers supply the desired services and their quality, and markets where jobseekers have different match values for the same provider. The next step is to examine whether these negative effects are substantial in real-world markets.

2.2. Empirical Evidence

This section discusses empirical studies that examine the impact of competition, caused by entry, on the quality of service provision. The studies report that competition generally improves quality, with some caveats. Following each relevant study is an explanation of which factors are potentially responsible for this result.

A starting point of our discussion is a paper by Bennmarker, Grönqvist and Öckert (2013[7]). The study focuses on partial market liberalization of employment services for hard-to-place jobseekers in Sweden in 2008. A share of those jobseekers, which were randomly selected, were allowed to receive employment services from private providers. The rest of the jobseekers stayed with the PES. The authors report that only 28% of these selected jobseekers chose to switch to private providers. This is surprisingly so, even though jobseekers could *on average* receive more assistance with job search and were more content with their placements than jobseekers that remained at the PES. This fact suggests that some jobseekers may not attach much weight on service quality. An alternative suggestion is that some jobseekers may find it costly to learn about service quality of private providers. Yet another suggestion is that some jobseekers may mistrust the reform, thinking that switching to private provides increases the probability of being sanctioned by the PES in case they remain unemployed (OECD, 2019[14]). The presence of such jobseekers may serve as a ground for the negative effect of competition (by private providers) on quality, as discussed in the previous subsection. In line with this prediction, Bennmarker and her co-authors report that adolescent jobseekers received worse services from private providers than from the PES. The result

implies that the negative effect of competition on quality was dominant than its positive effect for younger jobseekers. However, the authors also report that migrants benefited from the entry of private providers into the market. Migrant jobseekers, who received services from private providers, worked 119% more than their counterparts that remained with the PES.[6] This result supports the dominant positive impact of competition on service quality.

There are two points to be made about those two results of the study. One is that competition may affect different groups of jobseekers differently. The other point is that the power of the above-mentioned results is limited by the deficiency of data.

Effects of competition in the health care sector in the United Kingdom

Given a lack of additional studies focusing on the empirical effects of choice on the employment services market in practice, it is instructive to examine related examples from the health care sector in the United Kingdom. The health care system of the United Kingdom was a subject to a significant reform in the beginning of 2000s. Among other changes, the reform encouraged establishment of private hospitals and entry for general practitioners (or family doctors). Unlike public hospitals, private hospitals mostly provide routine surgical services, such as hip or knee replacement. Several studies examine the impact of the number of hospitals and practitioners in a given region on the quality of health care services, and generally they find a positive impact of competition on quality of health care services:

- Cooper, Gibbons, Jones and McGuire (2011[15]) study the impact of the number of hospitals on death rates from heart attacks. The authors compare changes in survival rates from heart attacks over time in regions with fewer hospital (namely, weaker competition) to those with more hospitals (namely, stronger competition). The authors observe a higher decrease in mortality rates from heart attacks (i.e., 0.31 percentage points per year) in regions with more hospitals than in regions with fewer hospitals after the reform took place.

- Bloom, Propper, Seiler and van Reenen (2015[16]) examine the impact of hospital entry on management quality[7] and survival rates from heart attacks. They show that entry of a hospital into an existing market improves management quality and reduces death rates from heart attacks by 9.7%.

- In a similar vein, Cooper, Gibbons and Skellern (2018[17]) report the favourable effect of hospital entry on patients' waiting time. The waiting time is a time duration between a patient's admission to the hospital and her surgery. The authors show that entry reduced the waiting time by 16%.

- Gravelle, Liu, Propper and Santos (2019[18]) focus on the effect of competition on service quality by general practitioners in the United Kingdom. The authors measure the medical-care quality by including data from the national Quality and Outcomes Framework and reports of patients' satisfaction. Competition is measured by the number of general practitioners in a given geographical area. Owing to the reforms, which took place in 2002 and 2004, entry barriers were lowered. This raised potential doctors' incentive to enter the market. The authors show that stronger competition has led to higher service quality, but the magnitude of this favourable impact has been found to be small.

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[6] This may have provided the rationale for establishment of "Etableringslotsar" in 2010, which provided contracted-out employment services to recent immigrants (see Section 4.2 for details).

[7] To measure management quality the authors employ the following method. Each manager is interviewed by different interviewers. The authors compare outcomes of interviews for each manager and find that these outcomes are consistent. The authors then match this survey results with information on firms' balance sheets and stock market values to further verify validity of interviews (for more details see Bloom and van Reenen (2007[98]) and Bloom, et al. (2012[99])).

A notable point in all these studies is the favourable impact of the number of medical service providers on the service quality. Yet this point needs to be considered carefully. It is fair to say that that the positive effect of competition on the medical service quality is stronger than its negative effect. A possible explanation would be that people choose their providers more carefully when it comes to, for example, a knee replacement surgery than when it comes to, for example, a class on cover letter writing. As a result, it is reasonable to conclude that competition for customers is more intense in health care markets than in quasi-markets for employment services. Nevertheless, great care is required in measurement of service quality. All the above studies focus on certain aspects of quality. Although service quality improved due to competition in those dimensions of quality considered by the studies, it may have fallen in other dimensions. A good example of this is a study by Propper, Burgess and Gossage (2008[19]) who show that competition raised quality of services that were publicly reported and thus observed by patients, but diminished quality of services that were not publicly reported. The authors explain that to attract patients, hospitals transferred resources from services that were not publicly reported to services that were publicly reported. This puts forward a question on transparency of service quality, which is beyond the scope of the current section and a topic of Section 4.2.

Effects of competition in the education sector

Another related set of empirical findings relate to the effect of competition on education quality. The studies discussed in this section focus on public and private schools in the United States (while a number of other studies, including for Sweden, are discussed in the section on client choice, Section 4.1). Some of these studies consider a specific state, whereas other studies consider multiple states. A general finding is that competition positively affects education quality.

Competition has been found to exert positive effects on public school performance (Millimet and Rangaprasad (2007[20]), Millimet and Collier (2008[21])). The studies, which focus on the state of Illinois, show that a public school in any district faces significant competitive pressure from those in the neighbouring districts. They report that this competition positively affects important determinants of education quality, such as a pupil-teacher ratio and expenditure per pupil. The explanation is that if a school adopts new policies to improve its quality, neighbouring schools respond by investing in quality. Doing so allows the schools to prevent their students from transferring to otherwise higher-quality schools.

Several studies confirm the positive effects of increased competition as measured by geographic distance. In the United States, some public schools are located geographically close to neighbouring public schools, whereas others are far from their neighbours. For example, schools in urban areas are likely to have closer neighbouring schools than those in rural areas. Public schools with closer neighbours face fiercer competition than those with more distant neighbours. This is because parents, who have an easy access to many schools, can easily switch their kids from one school to another in the same region if they are not satisfied with their current school. Borland and Howsen (1992[22]) report that public schools that face stronger competition have higher quality than those facing softer competition. This study has been extended by Hoxby (2000[23]) who employs more sophisticated econometric techniques. The author supports the findings of the earlier study. Similar findings are reported by Hanushek and Rivkin (2003[24]) who focus on schools in the state of Texas.

In another study Hoxby (1994[25]) examines the reaction of public schools to competition from private schools in the United States. Like in her other study, the author shows that pupils in public schools facing fiercer competition perform better than their counterparts in public schools enjoying weaker competition. Dee (1998[26]) extends the above study by employing a different data set and a more sophisticated statistical method. The author confirms Hoxby's finding that public schools improve their quality when they face competition from private schools.

In a similar vein, Zimmer and Buddin (2009[27]) test the impact of presence of charter schools in the state of California on education quality of public schools. Charter schools are publicly financed just like public

schools. Yet they are subject to fewer regulations than public schools. By employing survey data and data on student scores, the authors report that public schools do face competitive pressure from charter schools. However, this competition does not significantly impact student outcomes in public schools. A possible explanation lies in the small size of charter schools. As only 5% of students in the study were enrolled in the charter schools, the public schools might not have felt threatened by the charter schools.

Just like in the case on health care markets in the United Kingdom, a more competitive environment raises the quality of education in schools in the United States. But as the last discussed studies suggests, the level of competition needs to be strong enough to induce schools to invest in quality.

2.3. Suggestions to Ease Entry and Foster Sustained Competition

The previous subsection implies that competition is likely to improve service quality in many markets similar to that of employment services. This subsection presents ways to ease entry into the quasi-market of employment services in Sweden. It first discusses relevant aspects of the market that may prevent entry and then recommends changes to facilitate market entry and foster sustained competition.

For the purposes of providing services in KROM, Sweden's' 290 municipalities are divided into 72 delivery areas. There were 157 unique service providers operating within KROM in July 2022. The providers differed in their sizes: 25 of them operated in more than ten delivery areas, 26 of them in 6-10 delivery areas, 56 operated in 2-5 delivery areas, and 50 providers operated in a single delivery area. The largest providers may present entry barriers due to their advantage in size and experience. Their large size allows them to operate by incurring short-run losses which small potential entrants may not be able to afford. Their experience permits them to respond to market changes in a timely manner, which is not likely to be the case with new unexperienced entrants.

One set of entry barriers relate to criteria for becoming a provider and minimum service requirements. They include a potential provider's experience in providing services similar to employment services, a provider's physical presence in the respective region, and qualifications of its staff (OECD, 2022[28]). Such requirements have been present before (i.e., under STOM), but they got generally stricter within KROM. For instance, within KROM a potential provider needs to demonstrate its experience in provision of at least two different types of services, e.g., job search and skill training. In contrast, only one piece of such evidence was enough within STOM. Consultations with Arbetsförmedlingen staff indicate that that the stricter quality requirements have led to higher rejection rates. For example, within KROM, 60% of applications have been rejected. This has led some providers to apply for a contract (a provider can operate in a given region if it is awarded a contract by Arbetsförmedlingen) multiple times, e.g., 5-6 times.

Yet another potential entry barrier is due to KROM's payment model. In comparison to STOM, KROM attaches more weight on outcome-based fees. [8] These are the fees that providers receive after successfully placing their clients into jobs or certain educational programmes. They also include bonus payments which are awarded for placement of jobseekers into jobs within the first year with their provider. The former

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[8] Langenbucher and Vodopivec (2021[95]) inform that many other countries employ outcome based payment schemes. Examples include Australia within *jobactive* where 64%--75% of total fees are outcome based, Ontario, Canada within *Employment Services Transformation* where roughly 23% of total fees are outcome based, France within *Private Placement Operators Scheme* where 50%--60% of total fees are outcome based, Italy within *The Reintegration Voucher* where roughly half of total fees are outcome based, Republic of Korea within *Notional Employment Support Program* where outcome based fees varied between 6% and 70% depending on the salary, the Netherlands within *Open House Contracting* where 40%--50% of the total fees are outcome based, New Zealand within Assistance *Employment Placement* or *Assistance Initiative Contracts* where 73%--78% of the total fees are outcome based, the State of Wisconsin within *Wisconsin Works (W-2)* where 70% of the total fees are outcome based, New York City within *CareerCompass* and *CareerAdvance* where 30% of the total fees are outcome based.

payment constitutes around two thirds and the latter one around 28% of total fees. Although such fees incentivize providers to place their clients into jobs in a short period of time, it may be challenging for small potential providers to operate under such payment scheme as they may make losses during the first year after entry. This may be especially problematic for potential providers from the social economy. The payment scheme poses additional barriers as it provides an advantage to the existing large providers that can operate with short-term losses.

In the light of these entry barriers, the Swedish authorities may consider several ways of facilitating entry and fostering sustained competition by improving the conditions under which providers operate:

- **Carefully consider each entry requirement, possibly allowing for variation across service areas**. In terms of these requirements, one of the most onerous ones mentioned in the consultations conducted by the OECD was the requirement to maintain a physical presence (in-person office hours) in each service area for at least 16 hours per week. This requirement was cited by many *KROM* providers as the most binding one limiting their presence in regions where client volumes were not expected to be sufficient.

- **Simplify application requirements for existing providers apply for new regions**. For instance, all applying providers need to go through seminars provided by the PES; yet such seminar may not be needed to already existing providers that apply for a new contract in a different region**.**

- **Simplify reporting requirements and streamline data sharing and exchange.** While providers report that they have more flexibility to tailor activities to clients' needs in the KROM programme than in STOM, they nevertheless mentioned that they dedicate much of their time to administrative work. Current reporting requirements are burdensome to providers, and while some reporting is necessary from a monitoring perspective, it is not clear to what extent the information gathered is useful to Arbetsförmedlingen for this purpose (in its present form, it also appears difficult to use for research purposes).

- **Take steps to improve communication with providers to facilitate their operations**. Consultations with providers indicate that they often experience numerous challenges in their communications with Arbetsförmedlingen. These range from a difficulty finding the appropriate contact for specific questions about their clients to uncertainties in contract management, such as long and unpredictable wait times for applications to expand services to new delivery areas. These problems may partly reflect a lack of staff resources and organisational challenges stemming from the ongoing reorganisation of Arbetsförmedlingen. However, before any reform is enacted, there should be a concerted effort to ensure that Arbetsförmedlingen has the staff and resources to reflect its new importance as a contracting authority. Any such efforts should also be balanced with the need to ensure the provision of other services provided by Arbetsförmedlingen, especially at local and regional offices.

In tandem with reconsidering the entry requirements, Arbetsförmedlingen may consider changing the monitoring framework to focus on specific, poorly performing providers. The focus of monitoring could shift from whether a provider is deemed systemically important to one based on other metrics, such as Star Ratings, client surveys and the extent to which providers are enforcing activation requirements.[9]

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[9] This topic is examined in greater detail in Output 1 of this project: OECD (2022[3]).

3. Entry into Non-profitable Markets

The previous section discussed the potential for a large number of providers to yield competitive benefits – but **how can a sufficient number of providers be guaranteed in each contract area**? This section addresses the question of entry into non-profitable markets. It is relevant particularly for some of the lower density regions of Sweden, especially regions in the north and mid-west, which do not have any providers in the KROM programme. The section discusses options for different procurement methods to ensure a presence of providers in such a region. It also discusses issues that are important to ensure that a sufficient number of providers stay in operation in each of the service delivery areas that currently do have providers.

Currently, the lack of service provision affects a small number of jobseekers. As of July 2022, there was a lack of providers in 7 out of the 72 service delivery areas in KROM. However, only about 500 registered unemployed, comprising 0.2% of Sweden's registered unemployed, live in these delivery areas. In total, roughly 100 jobseekers living in these areas would currently be eligible to partake in the matching service: although they contain approximately 700 individuals, the majority of individuals are not (currently) eligible for referral to KROM. Furthermore, jobseekers can get reimbursed for commuting costs to receive services from providers in nearby service delivery areas. In most delivery areas that are lacking a provider today, the jobseekers are eligible for reimbursement for the commuting associated with neighbouring delivery areas (although they would not be compensated for time lost to commuting).

Ensuring that all jobseekers have equal access to matching services is an important precondition of the Swedish reform. The question of entry into non-profitable markets is thus an important one, and crucial for the success of the reform.

3.1. Theory of Procurement

In theory, **there are two general approaches to tackle the problem of entry into non-profitable regions**. A "direct approach" consists of straightforward interventions in the regional market to make it profitable (e.g., by lowering costs or enhancing the payment scheme). Although they are based on simple ideas, suggest a direct approach should be carefully considered given the trade-offs involved (e.g., lower quality levels or higher expenditures for the contractor). The other approach is to restructure the market – either on regional level or as a whole – by using auctions to reveal providers preferences and incentivize market entry. Unlike the direct approach, this may also affect functioning parts of the market (i.e., profitable regions) or lead to asymmetric entry requirements. Moreover, an auction has to be designed very carefully to prevent any form of collusive behaviour by the providers.

Providing additional payments for providers to operate in otherwise non-profitable areas is one approach to incentivise entry. One approach is to increase the outcome-based fee in these areas or offer additional monthly lump-sum payments. Alternatively, providers could be exempted (at least partially) from certain taxes for operating in such areas. This raises the question of how large the financial incentive should be to operate in such areas.

One way to determine the optimal size of financial subsidies is by requiring providers to compete in a procurement auction. The most simple type of auction of this type is described in in Box 3.1.

Box 3.1. Procurement Auction via a Reverse English Auction

A procurement auction is also called a reverse auction since the role of seller and buyer are reversed compared to a classical auction. In such an auction, one buyer and several sellers with different cost structure who compete for the sale price of their product. Typically the buyer is interested in buying from the seller with the lowest costs for providing the good since she should commit to the lowest price. This can be achieved by a Reverse English Auction starting with a high price at which all sellers would like to sell and then slowly decreasing this price until only one seller who would like to sell her good is left.

In terms of employment services, we have the PES (a buyer) and potential service providers (sellers). The estimated cost of providing services of a certain quality differs across providers. In a Reverse English Auction the announcer starts with a lump-sum potential maximum per client payment and slowly decreases it. Each provider announces their wish to leave the auction as the payment amount falls. The payment amount decreases until one provider is left. This amount is the level which the PES has to pay to the provider, who in turn has the obligation to provide employment services in the respective region at that price.

Such auction formats are commonly used in the market for communication services (Sörres, Nett and Wissner (2020[29])). The advantage of using an auction is that providers have to reveal at which minimum subsidy amount they are willing to enter the market. Therefore, the contracting authority only needs to make sure that the maximum payment amount at which the auction starts is suitable to generate incentives for participation in the auction – rather than estimating the optimal payment amount itself.

To incentivize truthful bidding (i.e., each provider stays in the auction as long as it is profitable to enter the market with the amount displayed and drops out immediately if it becomes non-profitable), the contractor has to commit to the auction rules. This includes the implementation of the auction's outcome without renegotiating the payment amounts with the winning bidder or offering any contracts to the losing bidders. If the contractor would allow all providers to be awarded contracts in case they enter the market, there would be no truthful bidding in the auction. The providers could collude by bidding the maximum payment amount (i.e., every provider except one drops out immediately after the auction started) which will then be the outcome of the auction. In that case every provider would enter the market and receive the maximum payment amount. This would lead to extremely high costs for the contracting authority

Source: Source: Sörries, B., L. Nett and M. Wissner (2020), *Die Negativauktion als ein Instrument zur Versorgung weißer Flecken mit Mobilfunkdiensten* [The negative auction as a tool to cover white spots with cellphone service], https://www.econstor.eu/handle/10419/228676.

If sellers' goods are not homogeneous, **the buyer may also take the level of quality into account**. Therefore, one needs to include the level of quality in the financial bids (i.e., there is not one single price but a price vector assigning to each quality level a specific price). In terms of employment services in Sweden, this could be done either by using an outcome-based payment rather than a lump-sum payment (e.g., the additional payment for successfully served jobseekers will be increased) or by letting the providers commit to additional minimum service requirements for a higher lump-sum payment (see Sörres, Nett and Wissner (2020[29]) for how the latter was implemented in the United States market of providing broadband services).

In the context of employment services in Sweden, the PES in principle would like to **procure services from more than one seller**. If the PES wishes to contract out services to more than one provider without restricting to a fixed number of providers, they can use an auction format which endogenizes the number

of winning bidders. An auction format with this feature has been proposed by Gebhardt and Wambach (2008[30]) as the "Jumping English Auction"[10] (Box 3.2). Such an auction attempts to strike an appropriate balance between having a service area with multiple providers with the recognition that having more providers can make service provision more costly (assuming each provider has certain fixed costs, which must then be recouped across a lower number of clients). This requires setting payments high enough to ensure that providers have an incentive to enter the market.

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[10] In their paper, the auction format was introduced as an extension of the standard English Auction, but it can be defined in a similar way for the Reverse English Auction as lined out in Box 3.2.

Box 3.2. Jumping English Auction

Similar to a Reverse English Auction, a "Jumping English Auction" also begins with a high starting price and then invites lower bids, but it also introduces so-called "jumping points" in the descending price. The format provides additional financial incentives for bidders to reveal their true prices by providing a disincentive for attempting to game the system, instead revealing their "true" price at which they are willing to enter the market.

In a Jumping English Auction, the bidding proceeds as follows. It initially begins at a high price – high enough that all sellers should conceivably be willing to provide services – and then slowly decreases. If a certain pre-specified level (jumping point) is reached, the price goes *up* and the number of winners increases. These jumping points are specified as follows. The auctions starts with the presumption that there will be a single winner. If the auction price reaches the first jumping point and two or more bidders are still in the auction, the price will jump up to a higher level and the amount of winners is increased to two. From this level the price will decrease again, but now the auction ends if only two providers remain in the auction – rather than one. In that case, both providers will be awarded with the contract and have the obligation to enter the market. If however, the second jumping point is reached and there are still three or more providers in the auction, the amount of winners is increased to three, the price will jump up and decrease again until only three providers remain in the auction. This procedure may be repeated with additional jumping points.

In the context of procuring employment services, jumping points could be defined based on the willingness of the contracting authority to pay for more than one (or, possibly, two) providers to enter the market in a given service area where there otherwise would not be any providers. For example, to give a purely hypothetical example, Arbetsförmedlingen could be willing to pay up to EUR 15 thousand for sustained employment outcomes to a provider in a given service area if it turns out only one provider is willing to enter the market. If two it turns out that two providers are willing to enter the market, it could be willing to pay up to EUR 12 thousand. If three or more providers would be willing to enter the market, it could be willing to pay up to EUR 10 thousand. In a "Jumping English Auction", these "jumping points" would be set in advance of the auction but would be not disclosed to those bidding in the auction (except during the course of the auction itself).

The intuition for using this procedure – which at first may seem unnecessarily complicated – is that it provides a disincentive for auction participants to attempt to engage in strategic behaviour. If the jumping points are defined sensibly, it is a dominant strategy (i.e., a strategy which is optimal regardless of the strategies chosen by the other providers) for each provider to stay in the auction as long as the region is profitable conditional on the amount of winners, and to exit the auction as soon as the region becomes non-profitable. The auction will then end with the efficient trade-off between the amount of subsidies to be paid and the number of providers entering the market.

In addition to subsidies, it is possible to "bundle" non-profitable areas with profitable areas and contract them out together. Thus, instead of procuring each of the predefined areas on its own, one could design a combinatorial auction. This is described in Box 3.3.

Box 3.3. Combinatorial Auction

In a combinatorial auction, multiple goods are sold at once and bidders are allowed to place bids for any combination of the goods. The auction designer then allocates the goods in a way that fits their objectives best. Usually such auction formats are applicable if bidders have non-additive valuations on bundles of items, i.e., they value combinations of items more or less than the sum of their valuations of individual elements of the combination (see, e.g. Vickrey (1961[31]) Palfrey (1983[32]), Krishna and Tranaes (2001[33])). But these auction formats can also be helpful to sell goods with low demand if the seller restricts the auction to several combinations of the goods (e.g., by excluding the sale of single goods).

In terms of employment services, PES could bundle multiple regions (e.g., a non-profitable region with a highly profitable region such that the bundle is profitable) and not allow applications to bid for single regions. They could then announce to accept the applications for the bundles in a way that achieves the highest market coverage. Thus, to enter a highly profitable region, the providers would have the incentive to apply for a bundle with this region which contains many of the non-profitable areas such that the bundle still remains profitable for them. To incentivize participation in the auction, PES could commit to restrict the maximum number of regions bundled together such that the providers do not have to apply for bundles which are marginally profitable to get access to the highly profitable areas. Moreover, the auction format can be specified such that for each provider only one bundle for each region can be accepted. Providers will then apply for different bundles containing the same highly profitable region, and PES can accept the applications in such a way that several providers get access to the highly profitable regions and all the non-profitable regions are covered by at least one provider. Even if providers would collude by applying for bundles with one highly profitable and one non-profitable region only, PES could choose, for each provider, a bundle with a different non-profitable region to generate high coverage.

Sources: Vickrey, W. (1961), Counterspeculation, auctions, and competitive sealed tenders, *Journal of Finance*, 16(1), 8-37, Palfrey, T. (1983), "Bundling Decisions by a Multiproduct Monopolist with Incomplete Information", *Econometrica*, Vol. 51/2, p. 463, https://doi.org/10.2307/1912001, Krishna, K. and T. Tranaes (2001), "Allocating Multiple Units", SSRN Electronic Journal, https://doi.org/10.2139/ssrn.60792.

Instead of using an auction format, one could also think of directly negotiating bundles of profitable and non-profitable areas with interested providers. Lalive and Schmutzler (2011[34]) compare auctions with negotiations in a specific public procurement process – namely, of regional passenger railway services in Germany – and find empirical evidence that auctions result in more efficient outcomes, as predicted by theory.

3.2. Procurement in Practice

This section discusses empirical studies examining the impact of procurement processes on market entry and quality provision. Since there exists no empirical study on the performance of procurement auctions in employment services, it examines markets which share its key feature – the higher per-unit costs of provision in rural areas. Most of the studies analyse markets for communication services which (used to) share a lack of availability in rural areas. The studies report that subsidies enhance market entry and procurement auctions generally reduce the contracting authority's expenditures.

Because public employment services should be available for every jobseeker, they can be classified as universal services, just as electricity, transportation, water, or telecommunications. Regarding the latter, Wallsten (2009[35]) gathered global experience with procurement auctions (including

from Australia, India, and Chile). He concludes that properly designed procurement auctions reduce the level of subsidies and provide information about the right level of subsidy which the providers need to be willing to enter the market. However, some of his examples show that flaws in the auction design may lead to a high level of subsidy, even close to the maximum amount. These extreme outcomes occurred in designs which excluded many small providers from the auction – due to the requirement of an already existing infrastructure of basic services – or which set the subsidy level based on the maximum subsidy amount from expected costs of large providers. He highlights the fact that reducing expenditures on universal services may not be consistent – at least in the short run – with increasing competition in a given geographic market. This is due to the fact that a procurement auction can effectively reduce expenditures by promoting competition for the market rather than competition in the market.

On the other hand, contracting authorities may have difficulty adequately anticipating costs, providing an argument in favour of carefully-designed auctions. Sörries, Nett and Wissner (2020[29]) gather international experience on how to incentivize entry into non-profitable markets. Their focus is on "white-spots" (i.e., undersupplied regions) in mobile communication services. In addition to the prior paper of Wallsten (2009[35]) they included results from the United States where a procurement auction was conducted in 2018. In contrast to the major examples in other countries, the Federal Communications Commission (FCC) used a two-step approach. As a first step, they identified for every white-spot the established provider of the area surrounding it and offered them a specific subsidy amount which had been determined by a cost analysis. Only in case the established provider rejected the offer, a procurement auction including all potential providers was conducted. They mention that, on average, the level of subsidy resulting from the second step was lower than the accepted offer in the first step. This validates the first result observed from Wallsten (2009[35]) (i.e., that properly designed procurement auctions reduce the level of subsidies). Moreover, they highlight another specification in the auction design. Instead of using the technical specifications as requirements to participate in the auction only, they included them in the financial bids to create a mix of quality and price criteria. Therefore, higher bids may be accepted if they come with a higher level of quality. This banishes the concern of having no competition in the market and, thus, a lower level of quality.

A mix of quality and price criteria have been used in the initial tenders for contracting out employment services, including Ontario, Canada and in the United Kingdom. The providers had to meet a minimum quality threshold to qualify for the financial bidding phase, and that quality score together with the providers past performance was integrated in the final score containing the financial bids. It would, therefore, be a natural extension to use quality and price criteria in an auction for subsidies.

Empirical evidence supports the hypothesis that procurement auctions can be a favourable approach for awarding subsidies cost-efficiently. In a recent study, Oh (2021[36]) analyses the subsidy allocations from the Broadband Technology Opportunities Program – the federal government of the United States awarded hundreds of subsidies for broadband infrastructure with stimulus funds from the Recovery Act of 2009 – and compares the actual outcomes of a classical selection process without competitive bidding with those that a procurement auction may have yielded. She concludes that a procurement auction might have resulted in nearly twice as many connected buildings than the subsidy selection process. If low-cost bids were selected over high-cost bids in a procurement auction, thousands of additional buildings might have been connected with broadband.

Similarly favourable view on auctions are found by an OECD study on how to extend telecommunication services to the rural poor (Perset, 2004[37]). They conclude that well-designed minimum-subsidy auctions are a promising mechanism to expand telecommunication infrastructure to the rural poor since these aim to be explicit, transparent, cost-based, and both determined and allocated through the market.

Once the decision to use a procurement auction is made, which specific auction design should be chosen? Lundberg (2005[38]) provides an empirical analysis on different Swedish procurement auctions

which gives the insight that the award criterion is a crucial part of the auction design. Moreover, she analyses the differences between several single unit auctions and their multi-unit counterpart (i.e., instead of procuring each contract in a separate auction, one can procure all contracts simultaneously by letting the bidders place separate bids on each contract). While theory suggests that winning bids differ in these auction formats, it is not validated by the data. Contracts auctioned under the single unit format did not systematically result in in a lower price than simultaneously auctioned contracts. The conclusion is that the bids on contracts auctioned simultaneously are submitted independently of each other. Because it may be less costly and time consuming, a simultaneous multi-unit auction would be preferable to several separate single-unit auctions for each relevant area. [11]

Recent developments in Australia show that one has to be very careful when restructuring an entiremarket. If there is too much disruption (i.e., many providers' contracts are not renewed), there will be a large share of long-term jobseekers who have to move to a new service provider where they need to establish new relationships (Marin-Guzman, 2022[39]). Thus, they instantly move further away from the job market. To prevent this form of disruption, PES needs to take the actual market structure into account when allocating the bundles in the reformed market.

3.3. Suggestions to Incentivize Entry into Non-profitable Markets

Market entry into undersupplied areas can be incentivized in several ways. These recommendations can be either implemented individually or – to some extent – as a combined approach.

- **Subsidies for otherwise non-profitable areas could be awarded by a procurement auction.** Including the subsidy payment into the outcome-based payment would generate a mix of quality and price criteria and incentivize the winning provider to provide a quality level which serves the jobseekers successfully. In the long run – once information about the right level of subsidy has been revealed by the auction – Arbetsförmedlingen could specify different scales for outcome-based payments in different areas in their standard procurement process. If the cost structure does only change to a small extent, this would lead to a direct entry and there may be no undersupplied area in the future. However, if costs go down massively, a new procurement auction can save public money as lower subsidy amounts would be sufficient.

- **Service delivery in highly profitable markets could be bundled with less profitable ones.** Arbetsförmedlingen could make it mandatory to supply some of the non-profitable areas to get access to a highly profitable area by procuring bundles of these areas. How to set up the bundles could be determined by a combinatorial auction in which the providers can bid for any bundle of at least one non-profitable and at most one highly profitable area. This, however, has the downturn that there cannot be continuous entry into the highly profitable areas after the bundles are awarded.

- **Service requirements could vary across service delivery areas**. This does not mean that service quality should decrease, but rather that the parameters be changed to reflect the reality of providing services in less densely-populated areas. For example, minimum service requirements such as mandated office hours at a given location could be substituted with options for providers to mobile units for serving clients or on-site visits. Providers in sparsely-populated service delivery areas could be given an additional budget to be reimbursed for such costs.

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[11] Additional evidence on auctions, also from Sweden, compares two different procurement methods (Hyytinen, Lundberg and Toivanen, 2018[102]). In a so called "beauty contest," municipalities had greater freedom of choosing a bidder than in the first-price sealed bid auction where rules were pre-specified and then strictly followed. The authors report that municipalities rewarded contracts to in-house bidders (often with non-competitive offers) more often in the former method than in the latter method. Thus, outside bidders bid more aggressive in the former case than in the latter. As a result, the overall procurement costs were similar under both methods

Entry into non-profitable markets could also be facilitated with the other recommendations from Section 2.3: simplifying application requirements for existing providers apply for new regions, simplifying reporting requirements and streamlining data sharing and exchange, and taking steps to improve communication with providers to facilitate their operations.

4. Competition through Jobseekers

The Swedish reform envisions that client choice is to play a central role in the reformed system of contracted-out employment services (Ministry of Employment, 2021[2]). This important design feature has important implications for the functioning of the market: once a quasi-market for employment services is created, it is key to provide jobseekers (i) the choice of a provider and (ii) an easy access to relevant information about providers. Doing so helps to boost quality competition among providers. This section examines these two points.

4.1. The Role of Client Choice in Market Design

One important feature of both the reformed Swedish system and the recent pilot programmes is that a jobseeker can freely choose the provider from whom they receive employment services. Such a client choice based model of matching jobseekers to providers has been adopted by many other programmes in OECD countries.[12] Other matching methods employed in other quasi-markets for employment services use mandated referrals where clients do not have a choice.[13] In programmes where there is a single provider per region, jobseekers do not have a choice.

Different matching outcomes by different matching methods can be consequential if it is costly for jobseekers to switch providers. In the presence of switching costs, a matching method may also have psychological effects on jobseekers. The following sections first discuss the theoretical background of those two factors and then examine empirical studies related to them.

Theory of Switching Costs

Switching employment services providers entails a variety of costs for jobseekers, providers and the contracting authority. These include the time and effort spent on finding a new, more suitable provider, contacting the contracting authority to arrange the change, filling out relevant documents and exchanging necessary information, and establishing a client-counsellor relationship with the new provider. In the Swedish pilot programme Sweden in 2008, only around a quarter of the jobseekers chose to switch to private providers even though doing so had apparent benefits (Bennmarker, Grönqvist and Öckert, 2013[7]). This suggests that switching costs are present in the quasi-market within KROM.

The implications of switching costs on the functioning of markets has been the subject of a large body of literature in economics (e.g., (Rosenthal, 1982[40]; von Weizsäker, 1984[41]; Klemperer, 1987[42]; Farrell and Shapiro, 1988[43])). Empirical evidence shows that buyers have switching costs in a broad range of other markets and that these costs play a key role in determining sellers' market power. For instance, switching costs play a role in financial credit markets (Kim, Kliger and Vale, 2003[44]; Barone, Felici and Pagnin, 2011[45]), in utilities markets (Giulietti, Waterson and Wildenbeest, 2014[46]; Hortaçsu,

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[12] : Belgium (the pilot programme), Australia (*jobactive*)*,* the Netherlands (*Open House Contracting*), New Zealand (*Employment Placement*)*,* and the Republic of Korea (*National Employment Support Programme*).

[13] Examples include France's *Private Placement Operators Scheme*, Ontario's (Canada) *Employment Service Transformation,* Republic of Ireland's *JobPath,* and the state of Wisconsin's *Wisconsin Works (W-2)*. In the United Kingdom, the PES randomly assigned a consumer to one of the providers which supplies relevant services (this happened during the initial years of the United Kingdom's *Work Programme*). Later the share of jobseekers assigned to a provider depended on its performance. For instance, a provider that performed better than its rival in a given region received a higher share of jobseekers than the rival provider.

Madanizadeh and Puller, 2017[47]), and in mobile-telephony markets (Shy, 2002[48]; Grzybowski and Liang, 2015[49]; Grzybowski and Pereira, 2011[50]).

In the presence of switching costs, a system where clients make an informed choice is preferable to one where they are randomly assigned a provider. If a jobseeker has a high cost of switching, they are more likely to remain with a less preferred provider. There is also an indirect reason which is due to providers' reaction to a matching method. For example, random matching renders more market power to providers than vouchers method. One can understand the negative (indirect) effect of random matching on quality provision as follows. If jobseekers can choose a provider, each provider tends to improve its quality to attract jobseekers. Under random matching, providers do not have incentives to attract jobseekers because each provider is guaranteed to receive a certain share of jobseekers in a given region and, in addition, the assigned jobseekers cannot easily walk-away to competing providers. Therefore, providers have less incentives to invest in service-quality with random matching than with choice method (for details, see Section 2.1). Under random matching, theory predicts that providers would all end up supplying the lowest required quality level (Diamond, 1971[51]).[14]

Theory of Intrinsic Motivation

Factors influencing the psychological motivation of individuals is the subject of a large body of literature in psychology (e.g., (Deci, 1971[52]; Lepper and Greene, 1978[53]; Ryan and Deci, 2000[54])) and economics (e.g., (Benabou and Tirole, 2003[55]; Janssen and Mendys-Kamphorst, 2004[56]; Benabou and Tirole, 2006[57])). There are two types of motives that induce an individual to take a costly action, external and internal. External incentives modify (or restrict) freedom of choice, while intrinsic incentives induce individuals to take action without any obvious external rewards. The theory of intrinsic motivation predicts that in certain environments, external incentives are more relevant than an individual's intrinsic incentives, whereas in other environments, the opposite may be true.

Empirical studies have shown that choice can be a powerful motivator, with positive observed effects also on effort, task performance, and perceived competence (Patall, Cooper and Robinson, 2008[58]). In our quasi-market for employment services, one can consider random matching – even if it is determined by a rule such as the closest provider – as providing external incentives. With random matching, jobseekers are "forced" to one or another provider. In such a setting, some of such jobseekers may lose motivation to improve their skills with assigned providers. In contrast, jobseekers freely choose a provider within the vouchers method, and therefore they do not feel the restricting force and are likely to try harder to improve their skills and find jobs.

Empirical work on the role of client choice in employment services

A recently-conducted experiment in Flanders (Belgium) is to examine the role of making a conscious decision to choose an employment services provider. The Flemish public employment service (VDAB) and the University of Hasselt are conducting a field experiment to gauge the impact of

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[14] This theoretical result is known as "Diamond-paradox" after its author Peter Diamond, a laureate of Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel (2010). The paradox is oftentimes referred as an antagonist one to the paradox by Bertrand (see, Section 2). The main intuition behind the Diamond-paradox is very simple. Suppose that prices are fixed and sellers compete only in service quality. Also assume that all sellers supply services of the same quality. Then any buyer, who is randomly matched to a seller, does not wish to switch to another seller since there is no benefit of switching, as there is no quality difference across sellers, but switching is costly. If, however, all buyers stay with their randomly matched sellers and do not switch, it is beneficial for sellers to provide the lowest possible quality. This result is not supported by any empirical evidence, which is why it remains a theoretical paradox. Still just like Bertrand-paradox, the Diamond-paradox laid ground to a large body of literature on Industrial Organization.

vouchers method on jobseekers' employment. The experiment started in the beginning of 2021 in Antwerp. Jobseekers were randomly allocated into two groups and the experiment is to compare the success of finding jobs between groups. One of the groups is a control group where a VDAB consultant chooses a provider for each jobseeker. The other group is a treatment group where jobseekers are free to choose providers, and information about providers is available to jobseekers on an online platform. The experiment was motivated by theoretical findings on intrinsic motivation, i.e., the experimenters wish to test whether jobseekers in the treatment group are more motivated to improve their skills of finding jobs than their peers in the control group. Although initial data has been collected on the experiment, statistical analysis is still in progress and additional data is still being gathered. The results of the analysis are planned to be publicly available by the end of 2022.

Initial findings from the experiment in Flanders point to the positive effect of choice method on jobseekers' intrinsic motivation. Consultations with VDAB indicated several interesting preliminary findings. One is that 70% of jobseekers who were given a chance of free-choice, made their own choices. The other preliminary finding is that jobseekers who could freely choose providers did better in the job market than those in the control group.

Empirical findings on the role of vouchers in the education sector

Given a lack of studies focusing on the role of switching costs on the employment services market, it is instructive to examine examples from the field of education. As discussed in detail below, **empirical studies on voucher programs in schools generally show that the programmes have been had positive effects**. Specifically, they find two sets of mechanism through which choice exerts positive effects:

- positive *direct* effects, with increased the quality of the student-school matches, and
- positive *indirect* effects, which arise from schools' incentives to attract students, strengthening competition among schools and raising education quality.

However, it worth mentioning that vouchers may lead to a number of negative (intermediate) outcomes such as grade inflation which may cause overestimation of the positive effect of the voucher programme student performance (Epple, Romano and Urquiola, 2017[59]). In the context of Sweden's reform, this latter finding points to the need for carefully considering which outcomes are monitored and measured to ensure that providers are not engaging in strategic behaviour which would maximise their outcome-based payments without necessarily positively affecting meaningful labour market outcomes of their clients.

Evidence from the introduction of a school voucher system in Sweden indicates a variety of positive short-term effects on pupils' performance. In 1992 the Swedish government allowed establishment of private schools (or independent schools) and gave parents the freedom of choosing a school for their children. Sandström and Bergström (2002[60]) and Bohlmark and Lindahl (2008[61]) report that performance of pupils improved due to the reform. The measure of student performance include grades, results of standardized mathematics exam and those of exams necessary for high-school admission. The authors explain the positive effect of the voucher programme on student performances by stating that schools invested into better education because they wished to deter parents of their current students from transferring their kids to competing (otherwise of better quality) schools and to attract new students.

The school choice vouchers in Sweden have also been found to have positive long-term effects on a wide array of outcomes. Bohlmark and Lindahl (2015[62]) conduct another study to analyse long-term impacts of the voucher system on student performance. To measure student performance the authors test scores and average grade scores on mathematics and English, the fraction of students that complete a semester at the university, and the average years of schooling at the age of 24. The authors find that the impact of the vouchers on student performance is pronounced after a decade of the introduction of the

voucher system. The authors claim that the effect is mainly due to the competition that was caused by the voucher system, along with the increase in the number of private schools. In a similar study, Wondratschek, Edmark and Frohlich (2013[63]) find a modest positive effect of the voucher system on student performance. Student performance in this study is measured by variables such as an individual's health problems and criminal history at the age of 22, as well as their highest education degree and employment status at the age of 25.

A number of studies examine the impact of vouchers on education in the United States. A voucher programme undertaken in the city of Milwaukee in the state of Wisconsin allowed poor students in Milwaukee to choose schools. The programme started in 1990 and went through two phases. In the first phase which continued until 1998, only 1.5% of the annual enrolled students were in the programme due to the external cap on the number of participants. In the second phase starting in 1998, the limit was relaxed to 15%.

Two studies examining student outcomes in Milwaukee during the period before 1998 find positive outcomes. Given that only 1.5% of enrolled students could enter the programme, a lottery was used to award eligible students vouchers. Greene, Peterson and Du (1999[64]) compare the performance of students who were chosen in the lottery and could choose a school with the performance of students who were not chosen in the lottery. As students in both of these groups were eligible to participate in the programme, they had similar unobserved characteristics. The authors find that the lottery winners outperformed the lottery losers. The finding supports the direct positive effect of matching. It may also support positive psychological effect of the voucher system. Rouse (1998[65]) confirms this result by taking into account performance of students who won the lottery but decided not to participate in the programme (these students were not properly accounted for in (Greene, Peterson and Du, 1999[64])).

The favourable impact of the voucher programme on pupils' performance was also observed in Milwaukee after 1998 when the cap on the participants was relaxed. Hoxby (2003[66]) examines student performances in various disciplines across schools which differed in the share of students who were eligible to the voucher programme. Student performance improved substantially in schools with a high share of students eligible to participate in the programme. This finding supports both direct and indirect effects of the voucher system on education quality, both of which are positive. Several studies show that this result is robust for alternative specifications of the empirical model (Chakrabarti, 2008[67]; Chakrabarti, 2013[68]).

A set of studies conducted in Chicago show evidence of positive indirect and direct effects of school choice. In one study, the authors demonstrate the presence of the direct effect of a choice method by showing that half of the pupils who are allowed to choose schools actually do switch schools (Cullen, Jacob and Levitt, 2005[69]). However, this may also suggest that some families had high switching costs, as the other half of pupils stayed in their public schools. Moreover, the authors show that switching improved pupils' performance overall because schools where larger shares of students opt in to the programme tend to provide a higher quality education. This supports the positive indirect effect of the choice method, namely reactions of schools to students' right to choose schools. In another study (Cullen, Jacob and Levitt, 2006[70]), pupils applied for a lottery and lottery winners were allowed to attend schools of their choice. The authors compare lottery winners and losers. They find that lottery winners report of having less disciplinary incidents and being less frequently arrested than lottery losers. Although this immediate effect of the choice method is apparent, the authors do not observe its indirect effect.

Empirical findings on the role of vouchers in health care

Positive impacts of a client choice-based approach have also been found in the health care sector, including in Sweden. Since 2009 a system of choice has been in place in the Swedish health care market. In a report from 2014, the Competition Authority of Sweden finds that 95% of surveyed people knew that they can choose their primary health care centre (HCC) (Nordqvist et al., 2014[71]). A majority of them

thought that they made an informed choice of HCC. During the year preceding 2014, around a quarter of patients switched their HCC of which only slightly more than a third did so because of quality concerns. Such a low rate of switching is surprising given the fact that 80% of population had an easy access to another HCC, e.g., it took them five minutes to drive to another HCC. This fact suggests that such a low switching-rate is likely because of absence of a public information about HCC quality. Consultations with a representative of the Competition Authority indicate that patient tend to obtain information about HCC predominantly through word-of-mouth communication.

There is suggestive evidence that introducing consumer choice may have improved the quality of health care in Sweden. Two pieces of pertinent facts support this view. One is that a high number of HCCs shut down following the introduction of the choice system. At the same time, a large number of new HCCs were established. It would be fair to conclude that these were low-quality HCCs that exited the market and those were high quality HCCs that entered the market.

Studies analysing the health care market in the United States suggest that patients are likely to benefit from greater freedom of choice. Specifically, Dafny, Ho and Varila (2013[72]) and Ho (2006[73]) find direct positive effect of greater freedom of choice. The former study examines the impact of a choice of medical insurance on patients' well-being. Most employed Americans obtain health insurance through their employers. Employers offer restricted choice of health insurance plans. Dafny and her co-authors show that allowing employees a greater choice of plans improve their wellbeing. Similarly, health insurance companies allow a choice from a limited set of hospitals. Ho reports that this restriction has caused an annual loss of $1 billion across 43 markets she considers.

A study from the United Kingdom also finds evidence of positive indirect effects of client choice on the quality of care in the method in the National Health Service (Gaynor, Propper and Seiler, 2016[74]). In 2006 the government of United Kingdom introduced a reform that requires a physician to offer five hospitals to a patient where the latter can obtain a required treatment. The authors show that in the case of coronary artery bypass graft (CABG) surgery, "patients became more responsive to clinical quality" after the reform. This triggered competition among hospitals. Hospitals responded by improving their quality provision, which led a reduction in mortality and an increase in patient welfare.

Although these studies suggest a positive effect of client choice, one important potential limitation of client choice relates to so-called "choice overload". This refers to the potential for a great number of choices to "confuse" jobseekers. Several studies demonstrate that workers in the United States invest less in retirement plans when there are more numbers of different plans available (Sethi-Iyengar, Huberman and Jiang (2004[75]), Sethi-Iyengar and Kamenica (2010[76])). The studies examine clients of a investment company where some of clients were offered fewer saving options by their employers, whereas others were offered a greater number of such options. The studies report of a negative correlation between the participation rate in the retirement savings and the number of plans offered. When an individual is given a large number of options to choose from and some of those options are complex to understand, they may opt in to choosing a simple option or not choosing at all. Choice overload may be less likely to be a concern in the quasi-market for employment services, as understanding an investment contract may be more complicated than, for example, learning provider-specific information on some online platform that rates overall quality of providers, such as one in Australia's *jobactive* and Sweden's *KROM.* On the other hand, in both cases there were many options to choose from: the number of available investment options varied from 4 to 59, whereas the number of KROM providers in April 2022 ranged from 1 to 83 (depending on service delivery area), with the average jobseeker having to choose between 51 providers.

Another important potential limitation pertains to whether jobseekers can know which option is the best for them. A good example of this potential challenge is described in a study examining the examines performance of students in a semester-long course at the Massachusetts Institute of Technology (Ariely and Wertenbroch, 2002[77]). Students had to write three short papers for the course. Out of 99 students, roughly half were assigned to submit a paper at the end of each third of the semester. The rest could

choose deadlines. The expectation was that the students in the former group, who were restricted in their choice of deadlines, were likely to underperform in comparison to those in the latter group who could choose deadlines in an optimal way. However, on average, students who received external deadlines outperformed those who could freely set their own deadlines. The authors explain that students may not optimally choose their deadlines when they are given an opportunity to do so. In the quasi-market for employment services, a jobseeker may choose a suboptimal provider, for example, because of absence of provider-relevant information. Precisely this issue – the role of provider-specific information to inform client choice – is the topic of the next section.

4.2. Quality Transparency

While previous discussion suggests that allowing jobseekers to choose providers can improve service quality, providing information on the providers can help jobseekers make an informed choice. When such information is present, jobseekers can avoid low-quality providers and choose high-quality ones. Furthermore, informed choice by jobseekers helps to trigger competition among providers.

Arbetsförmedlingen aims to ensure transparent service quality by rating providers according to their overall performance and making these ratings publicly available. It first introduced this system within STOM, and has now incorporated it into its current implementation of KROM. Providers are rated on the basis of a number of factors, including provider-specific information such as a provider's success of placing jobseekers into jobs, labour market conditions such as unemployment rate in a given region, and satisfaction of jobseekers such as complaints. Because the Star Ratings relate to historical outcomes and KROM has only been rolled-out nationwide since January 2022, it will take time for the ratings to be available in all of the service delivery areas. As of August 2022, it was available in 6 out of a total of 72 service delivery area. But even in these delivery areas, it is only available for providers with enough of a track record in the service area for ratings to be calculated. For example, in the service delivery area of Västerås – the largest service delivery area for which Star Ratings are calculated – it was available for 33 out of 51 providers.

The Swedish system of rating providers is based on a system introduced in Australia (but which has been abolished as of July 2022 with the introduction of a new programme, *Workforce Australia*).[15] In Australia, providers within its previous programme *jobactive* were rated on the basis of provider-specific information, market conditions, and feedback from jobseekers. These different information is aggregated for each provider by applying many separate regression analysis. A provider received five stars if its performance was at least 30% above the national average, four stars if its performance was between 15% and 29% above the national average, three stars if its performance was between 14% below and 14% above the national average, two stars if its performance was from 15% to 39% below the national average, and one star if its performance was below 40% of the national average.

While a star rating system can help the clients make informed choices, the fact that Australia has abolished them as of July 2022 illustrates potential challenges in their calculation and usage. Because they are based on historical data, they may be of limited use in extraordinary situations such as during the COVID-19 lockdowns. Calculations of the ratings were in fact suspended during certain periods of the COVID-19 pandemic, due to a lack of reliable data (Henriques-Gomes, 2021[78]). Furthermore, consultations with Australian stakeholders indicated they were subject to constant criticism, with different actors contending they failed to adequately take into account important factors that could explain

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[15] While the Star Ratings were phased out of the newly-launched *Workforce Australia* programme, they remain in place for its Disability Employment Services programme (Department of Social Services, 2022[101]). Furthermore, the Australian Department of Health and Aged Care is introducing a star ratings for residential aged care which it expects to be available beginning in the end of 2022 (Department of Health and Aged Care, 2022[100]).

differences in outcomes. This points to the potential role of Arbetsförmedlingen counsellors in helping jobseekers understand the ratings and make the most appreciate choice for their specific circumstances.

Theory of Quality Competition

In order to better understand the mechanism through which competition can lead to improved quality, this section discusses the theoretical relationship between quality and information in markets. The study of this question in economics has its roots in George Akerlof's seminal study (1970[79]), which makes the crucial assumption that buyers do not observe product qualities. The model assumes sellers supply products of different qualities, with high quality products more expensive to produce, and compete on prices. It is thus beneficial for buyers to buy at the lowest price, assuming that a price is not indicative of quality. Sellers then find it unprofitable to produce high quality products and sell them at low prices. As a consequence, in such a model, all sellers eventually supply the lowest possible quality.[16]

Extensions of the basic model show the important role that addressing information asymmetries can play in the market (e.g., (Grossman and Hart, 1980[80]; Grossman, 1981[81]; Milgrom, 1981[82])). These studies are built on Akerlof's above-described model, but they allow sellers to credibly communicate product quality to buyers. For instance, car dealers allow buyers to test-drive cars. The studies show that all sellers will disclose information on their qualities. The understanding behind the idea is simple. Sellers selling high quality products want to disclose information about their product quality in order to attract buyers. Buyers will hence correctly predict that sellers which do not disclose information about their products sell lower quality products. Then, however, sellers who are in this low quality product pool but have a better quality than others in the pool wish to distinguish themselves from the rest in the pool. Thus, they will communicate quality of their products to buyers. The process continues until all sellers, except those with the lowest product quality, disclose information about their product qualities. This information unravelling will not drive out high quality products from the market, in contrast to Akerlof's study.

Recent literature extends the analysis to markets where sellers can signal their product qualities through prices, in addition to directly disclosing information on quality (e.g., (Daughety and Reinganum, 2008[83]; Board, 2009[84]; Janssen and Roy, 2015[85])). The main conclusion is that sellers may choose not to directly communicate their qualities to buyers. The reasoning is roughly as follows. Assume that there are two sellers and a product-quality of each seller can be either low or high. Only a seller knows its product's quality. Sellers have two different channels via which they can communicate product quality. One of them is a public disclosure of product quality. Examples include certification or rating by independent parties. The other channel is signalling through prices. For instance, a seller can set a high price to signal buyers that its product is of a high quality. If sellers choose the former channel, sellers engage in intense price competition. For example, if both sellers supply products of the same quality, they do not earn any profits as any seller raising its price to increase its profit will lose its customers to the rival seller (e.g. as in the Bertrand-paradox discussed in Section 2.1). Thus the sellers earn positive profits only if their products are of different quality. In contrast, if sellers do not disclose quality information, they can earn positive profits even if they happen to supply products of the same quality. The reason is that without public disclosure, a seller does not know the product quality of its rival. Roughly speaking, this uncertainty induces sellers to charge high prices as to earn high profits.

Theoretical models can thus be summarised to make the following predictions about service quality in markets. If service quality cannot be communicated to jobseekers, all providers will provide the lowest possible quality. Yet providers have incentives to reveal information on qualities either publicly (if

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[16] This study is known as "Market for Lemons" as it considers a market for used-cars, where low quality cars are called lemons. It is considered as a "cousin" of the Diamond-paradox (see Section 4.1). The result of the "Market for Lemons" study is a theoretical paradox rather than well-established empirical fact. Nonetheless, it has emphasized the importance of asymmetric information in markets.

other means of revelation is not possible) or through other less-competitive channels, such as prices. Providers prefer the latter method to the former. As prices are fixed in the quasi-market, providers may signal their quality, for example, via advertisements. The PES can help improve awareness of quality by introducing mandatory quality disclosure. One example of such a policy is an introduction of an online platform which rates sellers' service qualities, such as via Star Ratings. Quality transparency is expected to strengthen quality competition among providers, as a low quality provider is likely to attract a very small number of jobseekers and even exit the market as it may fail to attract enough jobseekers to be profitable or to meet minimum quality requirements set by the PES.

Empirical Evidence on the Impact of Transparency on Quality

Some suggestive evidence on the impact of transparency on service quality comes from two examples in contracted-out employment services in Sweden. The first example is from the *Etableringslotsar* programme, which ran from 2010 to 2015, and was designed to help immigrants establish themselves in the Swedish labour market through a network of dedicated support counsellors that were contracted-out to private providers. A large number of small providers were present in the market. Control over the providers' service quality was insufficient and the service quality was not transparent to the migrants (Riksrevisionen, 2017[86]). Therefore, the service quality was low. This case clearly emphasizes on the importance of provider-specific information on service quality. The second example comes from the Star Rating system used in STOM. A 2020 Swedish Audit Office review of STOM's rating system found that it provides jobseekers with useful information on the effectiveness of providers, with higher-rated providers attracting more clients (Riksrevisionen, 2020[87]). Furthermore, a participant who chose a provider with the highest rating (4 stars) could expect an average of 30 percentage points higher probability of achieving a successful outcome with that provider compared to if they chose a provider with the lowest rating (1 star).[17]

Additional empirical evidence on the impact of transparency on service quality comes from several studies of the health care market in the United States. In the beginning of 1990s, government agencies in the United States started providing public information about performances of hospitals and surgeons. Hospitals were ranked and surgeons were given ratings according to their assessed performances, such as mortality rates. The aim was to help patients to make an informed choice of their health services provider and, in line with our theoretical predictions, trigger quality competition as poor performing providers would need to improve their quality to attract patients.

One study from the health care market shows that buyers react to information on quality: they switch to providers with a higher quality (Pope, 2009[88]). The study gauges the effect of hospital rankings on the volumes of patients that hospitals receive. It mainly focuses on hospitalized patients in California from 1998 to 2004. The author reports that if a hospital moves one spot higher in the ranking, it experiences 6-7% rise in the patient volume and revenue. This result indeed suggests that public information on hospitals help patients to choose a higher quality hospital.

The shift towards higher quality providers based on increased transparency has been shown not only at the level of hospitals but also for individual surgeons. Wang et al. (2011[89]) study the impact of provision of public information about surgeons on the volume of services they provide in Pennsylvania. The Pennsylvania Health Care Cost Containment Council publishes aggregate health outcomes of patients for a surgical procedure used to treat coronary heart disease, coronary artery bypass graft surgery on its website. This information is provided at the hospital level as well as surgeon level. The authors find that

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[17] Successful outcomes here are defined as those triggering an outcome-based payment to the provider in STOM (Riksrevisionen, 2020[87]): four months employment, one semester of full-time upper secondary education study, or twenty weeks of full-time studies in post-secondary education.

underperforming surgeons receive substantially less patients after the provision of public information. A reaction of patients to the ranking is also confirmed by Dafny and Dranove (2008[90]).

On the other hand, information disclosure has the potential to have an adverse impact of on the overall quality of health care services received by patients. Examining the example of cardiac surgery reports cards, the starting point for the study by Yoon (2019[91]) is the observation that any surgeon can serve only a limited number of patients within any given period of time. The best surgeons get congested and this leads to reallocation of patients to lower-quality surgeons. Since patients are served in a first-come-first-serve manner, patients with non-urgent conditions apply earlier than those with urgent conditions. Patients with non-urgent conditions are likely to be aware of their sickness for a long time, and therefore they have a chance to apply early. In contrast, patients with urgent conditions are likely to be in that condition because of unexpected serious sickness. Therefore, the latter group is more likely to be matched with a low-quality surgeon than the former group. However, urgent patients benefit more from best surgeons that non-urgent patients. This leads to an inefficient allocation of patients to surgeons.

Several other studies examine a more serious perverse effect of quality disclosure on quality of health care (Dranove, Kessler, McClellan, Satterthwaite (2003[92]); Schneider and Epstein (1996[93])). The studies show that some surgeons were prone to not operate very sick patients who were likely to die. The reason was to avoid bad ratings which the death of a patient may cause.

The preceding discussion has shown that information disclosure may benefit jobseekers as they can make informed decisions. However, there can be negative effects due to providers' capacity constraints and their ability to reject jobseekers with very low chances of findings jobs. This former effect is relevant if there is a substantial heterogeneity in jobseekers abilities to search for a provider. Within KROM such heterogeneity may be present. Jobseekers who are eligible to KROM are grouped into several groups depending on their likelihood of being employed, or their *distance to the labour market*. It is likely that jobseekers closer to the labour market understand faster "how to properly choose a provider" than jobseekers further away from the labour market. Therefore, the former ones are likely to quickly choose high quality providers, which would leave the latter with low quality providers. However, jobseekers further away from the labour market may benefit more from high quality services than those closer to the labour market.

The other negative effect observed in the literature – providers rejecting clients with poor employment prospects – is not directly applicable in Sweden's contracted-out employment services market. Providers in the Swedish market cannot refuse to provide services to a specific jobseeker – they can only set caps on the total number of clients they can receive. If this is the case, a provider refuses any jobseeker independent of their distance to the labour market. Nevertheless, providers could conceivably try to convince jobseekers it would be in their best interest to switch providers in order to try to improve their ratings – a type of behaviour that the contracting authority should be careful to attempt to discern. However, Sweden could consider introducing the opposite – introducing ceilings on the number of clients that poorly performing providers could accept.

4.3. Suggestions to facilitate competition through jobseekers

One of the key parameters of the revised system of employment services in Sweden – having jobseekers choose their provider – holds the promise of yielding many benefits. Empirical studies have shown that choice, in itself, can be a powerful motivator for individuals – an attribute that is highly valuable for individuals who are unemployed. It can also yield positive direct effects, with increased the quality of the jobseeker-provider matches, as well as indirect effects, with even jobseekers not making informed choices potentially benefiting from a higher level of quality in the market. In a well-implemented client-choice based system, providers have the incentive to attract jobseekers by increasing their service quality. Section 4.2 discusses two preconditions for a client choice based system to be successful. One is that jobseekers can

easily access information on service quality of providers. The other condition is that there is no congestion at high quality providers – they are able to accept new clients.

Sweden could adopt several strategies to facilitate competition through jobseekers:

- **Include a wide variety of indicators and outcomes in rating providers**. Star Ratings can help jobseekers to choose high quality providers, which in turn incentivizes providers to invest in quality in order to attract jobseekers. Rating providers can also be useful for monitoring their performance. But the ratings may also need to take into account a variety of different indicators and outcomes, in order for the ratings to provide a fair account of providers' performance and to avoid having providers disproportionally focussing their efforts on the outcomes measured. This could entail including client satisfaction survey data in the calculations or publishing ratings on different metrics to portray a more nuanced picture of their performance.

- **Help jobseekers make an informed choice of provider by giving them the option to receive advice from Arbetsförmedlingen staff.** For many jobseekers, making an informed decision may be difficult based solely on providers' self-generated webpage presentations and Star Ratings (once they are available for KROM providers). Indeed, the experience from a pilot programme similar to KROM in Belgium (Flanders) in which counsellors helped jobseekers make an informed choice indicates that assistance from counsellors was found to be particularly useful for less-educated individuals, with a large majority of participants very happy with their eventual choice of provider.

- **Impose caps on the market share of poorly-performing providers if necessary.** If large numbers of jobseekers do not exercise their right to make a choice of provider but are allocated one based on distance, poorly-performing providers may not be subject to the disciplining effects of competitive pressures. This could lead to a poor quality of services in the market. Furthermore, to the extent that well-performing providers are no longer accepting new clients due to their (self-imposed) upper limits of the number of clients, jobseekers may disproportionally end up with less desirable providers. These congestion effects can be mitigated if poorly-performing providers have temporary ceilings on the number of clients imposed on them by Arbetsförmedlingen.

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