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# **PRIVATE HEALTH INSURANCE EXCHANGES**

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## **Abstract**

Many moderate-to-large sized employers are considering the use of unsubsidized private insurance exchanges to provide health coverage to employees, and a number of leading insurance brokers/human resource consultants and insurance carriers have established or are establishing exchanges. Proponents argue that private exchanges will allow employers to better control their costs and risk, while also facilitating greater choice among coverage options by employees. We provide an economic analysis of the potential ability of private exchanges to benefit employers and employees, focusing on how they would likely affect money wages needed to attract and retain the amounts and types of workers desired, and how the effect on wages likely compares with any savings in payments for plan administration. When viewed through this lens of net value added, it is far from clear that private exchanges will offer a cost effective mechanism for expanding choice and enhancing employers' affordability and predictability.

## 1. Introduction

Many employers, large and small, who now provide health insurance as part of their worker compensation package, are having second thoughts in the era of health reform. Even if they are not really eligible for the new state exchanges because they are medium-sized to large and have generally high income workers, a sizeable proportion of such firms, ranging from 29 to 56%, say they are seriously considering the use of private insurance exchanges (Aon Hewitt 2012; Mercer 2013a; Wall 2013). These exchanges, proponents argue, would allow employers to shed the bother and cost of managing employee insurance options, while still offering tax-free worker benefits. In a typical private insurance exchange, the employer converts its current open-ended promise to pay a share of health insurance premiums for one or two plans it selects into a defined dollar-amount, tax-shielded contribution toward the cost of more options listed on an exchange. The employer plans that its contribution grow at a rate it finds “affordable”. In the future, workers would then be responsible for premiums that grow faster than the predetermined rate, and for the unpredictable upside risk of premium growth fluctuations. Thus, compared to employer-arranged and managed insurance options, the exchange is said to offer more choice to workers while allowing employers assurance that they can afford to continue benefits.

Some consulting and insurance firms urge this change on employers as a way of dealing with the high cost and high risk of health benefits costs (Fronstin 2012, 11). For example, Booz and Company advocates exchanges as a way of “improving the control of current expenses and future liabilities,” thus helping to solve what they term “the affordability crisis for employers” (Borromeo et al. 2012).<sup>1</sup> A number of leading insurance brokers/human resource consultants and insurance carriers have established or are in the process of establishing exchanges (Borromeo et al. 2012; Aon Hewitt 2013; Mercer 2013b; Wellpoint 2011). Some of the argument for private exchanges is made for moderate sized firms, which currently are much less likely to offer multiple choices than large firms, but some private exchanges have been implemented by large firms (typically with many lower wage workers, such as franchise food chains like Darden Restaurants).

Plausible as the advice promoting private exchanges may sound, some of it is misleading and may well be harmful to the profits of firms that follow it, according to robust economic analysis. Viewed from an economic perspective, the main advantage to employers from private exchanges, if any, comes from the value to workers of having more coverage options at lower cost compared to the single or small number of options currently offered by the majority of firms. The employer-affordability feature, in contrast, is largely illusory in terms of improving future profits. Any advantage from replacing a current single-option plan with a private exchange may not be large.

Most importantly, workers will reveal any positive net value for this new arrangement by willingness to work for lower (or less rapidly growing) money wages than would otherwise have been the case. If workers value more choice, offering those choices may permit employers to lower labor costs. The economic evaluation of private exchanges requires thinking clearly and

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<sup>1</sup> A less sanguine view is provided by Fronstin (2012).

quantitatively about the net impact of such changes, not only on employer benefit outlays, but on the mix of wage and benefits costs needed to attract and retain workers.

This paper employs this economic lens to sift through the pros and cons of private exchanges. We contrast what the “rational” employer taking the total compensation approach to benefits would do with both current behavior and advice about private exchanges. We show that the “affordability” argument is very likely to be wrong; it is the (net of administrative costs) value-of-choice argument that remains to be established. This latter argument in theory could go either way, and we review empirical evidence on this score.

## **2. The Economic or Total Compensation Approach to Benefit Design**

The economic approach to benefit design stresses that health insurance benefit payments are part of a total compensation package. The basic model, in a world in which the supply of labor is not totally inelastic and workers may or may not place varying values on benefits, has been specified by Summers (1989) and Pauly (1997). The total cost of the compensation package that employers are willing and able to finance is determined by employee productivity and the supply of workers in the labor market (Pauly 1997). The optimal benefits policy then is to divide compensation between money wages and benefits so that the marginal dollar spent on wages generates the same value (“utility”) to employees as the marginal dollar spent on benefits. At this point, the value of a given dollar amount of total compensation to the marginal worker will be maximized.

In such a view, private exchanges make sense if and only if they permit a set of wages and benefit choices that workers would prefer to what is currently offered from the firm’s benefits department, at the same or lower total cost. To some extent this economic view is recognized even in the potentially misleading advice regarding private exchanges. Employers moving to a private exchange are warned that they might have “concern about maintaining competitive benefits.” But the economic approach goes beyond this vague suggestion of danger, pointing out that it is the competitiveness (in the local labor market) of *both* benefits and money wages that matters. It further spotlights the need to quantify this “concern” and tells the employer how to address it.

## **3. When Will a Private Exchange Provide Value?**

What are the claimed advantages of private health insurance exchanges, and how do they help increase a firm’s value? Consider moderate-to-large firms already offering health benefits, with initially only a single plan arranged by the employer. The question the firm might face is whether to replace a single health insurance plan (chosen from competitive offers) that it manages through its benefits department with a process where employees choose among a variety of plans managed in a private exchange. (Usually the exchange plans will be fully insured, whereas the firm’s initial offering is often self-insured, but the experience rating of insurance for moderate-to-large firms means that [tax and regulatory consideration aside] this distinction alone need not matter.) We assume that the firm’s long run goal is profit or value maximization, and that the contribution of benefits management to that goal is captured in total compensation cost,

including payments for money wages, benefits, and management of the compensation function (Pauly 1997).

Advocates of exchanges offer two arguments: that exchanges allow employees more choice, and that they allow employers to reduce the level and riskiness of their future medical benefits costs. We consider each in more detail. We also discuss briefly at the end some other potential benefits and costs from exchanges that have not been considered in this literature.

### **3a. Exchanges allow workers more choice among insurance options.**

Allowing workers more choice involves a tradeoff. Having more choices may increase workers' value of benefits on average, because more workers can get benefits closer to what they most prefer (given relative costs). But there are higher administrative costs to offering more choices to a workforce of a given size. On the value side, offering choices may be an advantage if individual workers a priori prefer more options than currently available and if the value they attach to greater choice exceeds the additional administrative cost.

Empirical evidence on the value of choice per se is mixed. Surveys of workers find that a large minority (40% in one survey) are at best only "somewhat satisfied" with the current health insurance plan (Fronstin 2011, 5). A firm selling ordinary products with such weak satisfaction measures would feel that it was doing something terribly wrong. But the unanswered question here is—"satisfied, compared to what?" Moreover, although some claim that "employees increasingly want more health care choices," usually those choices are among different providers of care, not necessarily among different insurance plans—some of which substantially restrict provider choice.

Here is the kind of choice calculus that is relevant. Suppose an employer is currently offering a single health insurance plan to its workers for which it contributes \$B and workers contribute \$C, with an administrative cost per worker of \$A. If it could add an additional insurance option at a higher administrative cost \$A', it will reduce its total compensation cost by doing so if, holding B constant, it can reduce money wages by more than (A'-A). For that to happen the average value of greater choice must be greater than the incremental administrative cost, so the question is whether enough of the typical firm's workforce is willing to accept lower wages or higher worker premiums for a costly additional option.

In addition, while more choice among plans in theory can lead to better matching, the value of better matching is complicated. Imagine that initially the firm was offering just one plan, and assume that the total and explicit worker cost for this plan would be the same under a private exchange. Those workers for whom the initial offering would have been their most preferred offering gain nothing from more choices on the exchange because they end up paying the same amount for the same thing; the gain is limited to any workers who prefer the new premium-value combinations in the exchange to that in the firm's initial offer.<sup>2</sup>

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<sup>2</sup> This assumes that the offering of choices does not change how workers feel about choices.

It may prove difficult, however, for the employer to benefit from such gains. Some workers gain, but many do not. Reducing the money wage or increasing the explicit employee premium for the initial option (to pay for the additional administrative costs of the exchange) will displease and potentially drive out workers who preferred that option. Unless the firm can single out the workers who preferred the new option for wage reductions or premium increases there will be problems. We know that offering more options adds cost, because cost must be incurred to arrange and explain the new options. What is unknown is whether the additional cost of offering choice falls when you offer it in a larger setting like an exchange (versus just offering multiple choices to the group at a single firm). We know of no empirical evidence on this issue by any of the advocates of exchanges, beyond imprecise suggestions that choice in exchanges will be “streamlined.”

Before exchanges, an insurer could offer multiple options to a smaller group, though at some cost; there is no obvious reason why this cost would be different in an exchange. An exchange can offer plans from multiple insurers, but brokers could arrange a multiple-plan offering before the advent of exchanges. It is possible but not obvious that exchanges will lower the total real contracting costs of providing access to plans from multiple insurers relative to what is available now, through better choice technology (i.e., less costly ways of offering and administering choices).

Choice is not currently offered to workers of most firms of moderate size. According to recent data from the Kaiser/HRET survey, only about a quarter of firms with about 500 workers offer more than one type of plan (e.g., HMO, PPO, or other); of those, almost all offer just two (Kaiser and HRET 2012). Only among very large firms (more than 5000 workers) do a majority offer choices among more than two plan types and, even here, the fraction doing so is still far from 100%. The inference is that, if employers are currently rational, the value of additional choices is lower than the current cost of additional choices.

Direct measurement of the value of more choice is ambiguous. Bundorf (2002) found that measurable worker characteristics associated with different ideal plans (like risk levels) predicted very little of the variation across firms in the number of choices. Herring and Pauly (2007) found that demand characteristics that predicted plan choice in the individual health insurance market generally had the same effects and magnitudes in predicting plan offerings in the group market. But Dafny, Ho, and Varela (2013), using direct measures of choices in a sample of workers in large firms only, concluded that employers did not offer employees’ most preferred plans. Their estimates suggest that employees would be willing to pay 13% more for a set of plans that reflects their preferences, holding constant the number of plans offered by their employer. Increasing the number of choices would further increase the value of choice, assuming employees do not incur decision costs that offset the benefits of the additional choices.<sup>3</sup> If these findings are reliable, the implication is that either the incremental cost of choice is higher than its benefit, or firms are erring in not offering more choices at higher administrative costs. However, the value of choice may be smaller for employees of medium-sized firms, the target market for

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<sup>3</sup> The study looked only at explicit incremental premiums, not at possible wage offsets or tax consequences.

private exchanges. Workers sort across firms based on benefit offerings. As a result, there is likely to be less heterogeneity in workforces of medium or small firms, as workers have a larger set of alternative employment-benefit options in this size range.

Still, the key issue for rational employers is not really what value workers place on choices, but rather whether exchanges can *lower* the cost of supplying those choices compared to what employers can currently obtain. Evidence or theory for strong cost reducing advantages from exchanges is not available and is not a major part of the marketing message for exchanges. A list of key considerations provided by Booz and Company (Borromeo et al. 2012) does not mention administrative cost at all.<sup>4</sup>

A case for increased worker demand that opens the door for private exchanges might also be based on an assumption of an *increase* in the value workers attach to having choices. There is little evidence, however, that workforces have become more polarized (e.g., with some workers preferring high deductible plans, others favoring selective PPOs, and still others sticking to generous, high coverage plans). Nor do we know of any evidence of greater heterogeneity in characteristics thought to affect the choice of plan, like worker income or risk aversion—and, in any case, these characteristics have been found to have only small effects on plan offerings (Bundorf 2002). Although the absence of evidence is not evidence of absence, the most plausible explanation for an increased worker taste for more choices would be a spillover from the public exchange option for individual insurance. Some workers may now feel that if choice is prominently offered there, they need choice as well. The recent Administration decision to limit the SHOP group coverage program in public exchanges would diminish this “demonstration effect”, if it ever existed.

### **3b. Exchanges allow the employer to move to a defined contribution approach to payment for health benefits.**

A second argument for exchanges is that they will permit employers to shift towards defined contributions for health benefits. The notion is that, given expectations that future total premiums will be unpredictable but probably growing at a fairly high rate, setting an employer payment that is predetermined and grows at a lower (“affordable” to employer) rate will benefit the employer through higher expected profits and greater predictability of profits, while still permitting workers access to insurance.

However, if total health insurance premiums grow and fluctuate as expected, moving toward a defined contribution model will subject the worker to much of the cost of the excess premium growth and to the consequences of unpredictable fluctuations in premiums. The benefit to the employer is therefore achieved only by imposing a cost on workers. At a minimum, compared to continuing the traditional benefits policy, workers will probably require higher money wages to compensate them for this reduction in the future value of their compensation.<sup>5</sup> To state the

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<sup>4</sup> It is of course possible that some employers are not economically rational when it comes to health benefits.

<sup>5</sup> If they do not require such an increase, they were being overpaid under the previous policy, in the sense that the compensation package must have been more attractive than needed to retain those workers or recruit as many new

obvious, if pain is imposed on workers by moving to an exchange with a limited defined contribution, employers will need to increase money wages to pay for it. Not only may this payment be larger than the expected savings from moving to the defined contribution, it will be taxable income for workers (to the extent it cannot be offset by cafeteria plan payments for higher insurance premiums).

A relevant question here is whether there has been a change in the net benefit to employers of shifting some of the uncertainty about premiums to workers and away from employers. Employers generally can pool risks more effectively than can workers if the sources of risk are diversifiable. If there are health care and insurance risks that cannot be pooled, workers should efficiently bear some fraction of them, and if those risks increase, workers should bear some share of the increase.<sup>6</sup> It seems challenging to say, however, that we know there have been changes in the risks of health care cost growth relative to other risks in the economy that tell us that workers are lower cost holders of more of that risk. And to say that employers cannot “afford” to pay benefits costs is equivalent to saying they cannot afford to pay money wages; in either case cutting back will cause the firm to lose employment and profits.

#### **4. Some Other Issues**

We have primarily emphasized differences in real administrative costs and real benefits as the major components of changes in premiums from exchanges. However, it is possible that exchanges could foster more competition between multiple insurers (though many exchanges are limited to different plans from the same insurer) and lower markups. But on the other hand, insurers tend to add higher “risk premiums” (above costs) for insurance plans sold to smaller numbers of people, largely out of concern for adverse selection and/or mispricing of risk, and to a smaller extent from concern for claims volatility. It is likely that either effect will be modest at most.<sup>7</sup>

Another conceivable advantage of exchanges to workers is that they could, over time, allow portability across employers, e.g., if a plan chosen in one employer’s exchange were offered by other employers through the same exchange or other exchanges. This possibility, which has received little mention, depends in part on what employers would allow. Most employers view their benefit offerings as ways of retaining employees, and so may be reluctant to facilitate portability. In a total compensation approach the employer’s choice should depend on whatever wage reduction employees would accept for portability versus the cost to the firm of the loss of firm-specific human capital from employee turnover.

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workers as desired. Some firms may set the value of the compensation package above the prevailing standard in the local labor market to be able to select more qualified workers, but such a firm would not choose to sacrifice this option by shifting risk to workers to reduce health benefits costs.

<sup>6</sup> This follows from the basic theory of insurance design with limited pooling. See Doherty and Dionne (1993).

<sup>7</sup> In addition, to the extent that increased choice could contribute to higher plan costs from adverse selection, there is no reason to expect that exchanges represent a better technology for managing that problem. Moreover, to date Fronstin (2012) notes that exchanges have not developed risk adjustment mechanisms which would be needed if they were to pool employees (of different risk levels from different firms) together.

## **5. Deciding on Private Exchanges: What to Look For**

The preceding discussion has a number of implications for employers. First, employers should not expect that using private exchanges to implement a defined contribution approach will allow them to costlessly shift future premium increases to current workers or costlessly stabilize employers' benefits costs. Second, employers should carefully consider how overall administrative costs are affected by a move to an exchange. If they can be reduced, an employer may be able to lower total compensation cost by using an exchange. It might be that choice is less administratively costly in exchanges than it formerly was in the offerings insurers or brokers made to moderate sized groups; perhaps exchanges represent a more efficient technology for choice. And perhaps even in moderate sized groups the variability in preferences has increased: whereas formerly most workers were reasonably content with the typical plan, now a sizeable and vocal fraction wants, say, high deductible insurance, while others cling to PPOs with moderate cost sharing. Employers should look at the preferences of their workforces and make a choice for or against an exchange based on what they find workers value, not based on arguments asserted by exchange sponsors and participating insurers.

Third, employers should consider how much value having more choices is likely to have to current workers or those they wish to attract. If workers at a firm generally seem to want more or less the same kind of plan, there is little to gain and something to lose from offering more choice at higher costs. (This is also the case if, as suggested by much of the work in behavioral economics, beyond offering a few options more choices cause worry, distress, and mistakes.) If instead the variation in workers' preferences for different plans has increased substantially, then there may be a chance to make them better off even at lower wages by offering more choices—with or without a private exchange as the intermediary.

## **6. Conclusion**

If an employer is following the rational total compensation approach, the advantages of private exchanges are likely to be modest and considerably less than advertised. The claimed "affordability" advantage of moving to a predetermined employer contribution and shedding most of the risk of high and uncertain growth in premiums almost surely is not valid, since in competitive labor markets it implies higher money wages for workers to offset a reduction in the attractiveness of their compensation package. The availability of more employee choice among insurance plans may be an advantage, but the rational employer should already have been offering choice if doing so provided value to workers in excess of higher administrative costs. Even here the gain from a private exchange would be limited to its ability to offer a better technology for choice (either lower cost or more flexibility) compared to the technology for offering two or three options currently used by larger firms. Evidence in support of these claims is currently lacking, but employers should pay primary attention to this feature, and determine what their workers are willing to sacrifice in terms of money wages or higher explicit payments for insurance in order to have more choice.

To sum up: private exchanges may appear to have much to offer employers who think that their benefits payments ultimately come out of firm profits and not worker wages. However, those views of compensation generally will not lead to highest profits or lowest labor costs. For employers currently taking a total compensation approach and paying appropriate attention to worker demands for choices, the exchange at best might represent an improvement over other technologies for offering workers options, but this advantage remains to be established.

## References

- Aon Hewitt. 2013. "Enrollment Results Show Aon Hewitt's Corporate Health Exchange Empowers Employees to Become More Astute Health Care Consumers." Aon News Releases (March 18, 2013). <http://aon.mediaroom.com/2013-03-18-Enrollment-Results-Show-Aon-Hewitts-Corporate-Health-Exchange-Empowers-Employees-to-Become-More-Astute-Health-Care-Consumers>.
- . 2012. *The Time is Now: Rethinking Health Care Coverage* (Corporate Health Care Exchange Survey). London: Aon Corporation. [http://www.aon.com/attachments/human-capital-consulting/Corporate\\_Exchange\\_Survey\\_Report\\_Final\\_2.pdf](http://www.aon.com/attachments/human-capital-consulting/Corporate_Exchange_Survey_Report_Final_2.pdf).
- Borromeo, Paolo, Minoo Javanmardian, Akshay Kapur, and Ashish Kaura. 2012. *The Emergence of Private Health Insurance Exchanges: Fueling the "Consumerization" of Employer-sponsored Health Insurance*. New York: Booz & Company.
- Bundorf, M. Kate. 2002. "Employee Demand for Health Insurance and Employer Health Plan Choices." *Journal of Health Economics* 21 (1): 65-88.
- Doherty, Neil A., and Georges Dionne. 1993. "Insurance with Undiversifiable Risk: Contract Structure and Organizational Form of Insurance Firms." *Journal of Risk and Uncertainty* 6 (2): 187-203.
- Dafny, Leemore, Kate Ho, and Mauricio Varela. 2013. "Let Them Have Choice: Gains from Shifting Away from Employer-Sponsored Health Insurance and toward an Individual Exchange." *American Economic Journal: Economic Policy* 5 (1): 32-58.
- Fronstin, Paul. 2011. "Health Confidence Survey: Most Americans Unfamiliar with Key Aspect of Health Reform." *EBRI.org Notes* 32 (September). [http://www.ebri.org/pdf/notespdf/EBRI\\_Notes\\_09\\_Sept-11.HCS\\_PolFor.pdf](http://www.ebri.org/pdf/notespdf/EBRI_Notes_09_Sept-11.HCS_PolFor.pdf).
- . 2012. "Private Health Insurance Exchanges and Defined Contribution Health Plans: Is it Déjà Vu All Over Again?" *EBRI (Employee Benefit Research Institute) Issue Brief* 373 (July).
- Herring, Bradley J., and Mark V. Pauly. 2007. "The Demand for Health Insurance in the Group Setting: Can You Always Get What You Want?" *The Journal of Risk and Insurance* 74 (1): 115–140.
- The Kaiser Family Foundation and Health Research and Educational Trust. 2012. *Employer Health Benefits: 2012 Annual Survey*. Menlo Park and Chicago: Henry J. Kaiser Family Foundation and Health Research & Educational Trust. Section 4. <http://kaiserfamilyfoundation.files.wordpress.com/2013/03/8345-employer-health-benefits-annual-survey-full-report-0912.pdf>.

Mercer. 2013a. "Mercer Introduces a Private Exchange for Active Employees—Mercer Marketplace." Mercer.com (January 10, 2013). <http://www.mercer.com/press-releases/mercere-exchanges>.

———. 2013b. "Mercer Signs First Group of Insurance Carriers to Mercer Marketplace Private Exchange." Mercer Press Release (April 15, 2013). <http://www.mercer.com/press-releases/1521295>.

Pauly, Mark V. 1997. *Health Benefits at Work: An Economic and Political Analysis of Employment-Related Health Insurance*. Ann Arbor: University of Michigan Press.

Summers, Lawrence H. 1989. "Some Simple Economics of Mandated Benefits." Papers and Proceedings of the Hundred and First Annual Meeting of the American Economic Association, *American Economic Review* 79 (2): 177-183.

Wall, J. K. 2013. "Mercer Courts Employers with Private Exchange." *Indianapolis Business Journal* (April 22, 2013). <http://www.ibj.com/mercercourtsemployerswithprivateexchange/PARAMS/article/40918>.

Wellpoint. 2011. "Health Care Service Corporation, WellPoint and Blue Cross Blue Shield of Michigan Collaborate in National Private Exchange and Defined Contribution Solution for Employers." Wellpoint Press Release (Sept 20, 2011). <http://ir.wellpoint.com/phoenix.zhtml?c=130104&p=irol-newsArticle&ID=1608251&highlight>.