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Samuel Cohen April 10, 2023

The Effect of the Number of Plans on Inertia and Adverse Selection: Evidence from the ACA

by

Sam Cohen

Evan Saltzman
Adviser

Economics

Evan Saltzman

Adviser

Victoria Phillips

Committee Member

Ian McCarthy

Committee Member

2023

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Sam Cohen

Evan Saltzman

Adviser

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Abstract

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In this paper I estimate the effect the number of choices has on both adverse selection and inertia within a market. Specifically, I am interested in whether choice overload can cause a decrease in adverse selection and increase inertia. To do this I utilize data from the ACA exchanges at the national level for adverse selection and inertia. I found that it is likely that an increase in plans correlates with an increase in adverse selection as consumers can make informed decisions from a wider array of choices. Inertia also decreases with an increase in choices. My model also estimates that at a high number of plans, both relationships reverse as choice overload takes effect.

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Contents

1 Introduction

1.1 Motivation

Navigating the healthcare market can be a difficult and confusing process for many Americans. For those who elect to choose plans on their state's healthcare exchanges, they can have dozens of complicated plans to compare and choose from. As individuals choose the plans they think are best for themselves, the market may reach an imbalance in risk between plans and/or insurers. This is called adverse selection and it is one aspect that prevents efficiency in the market. Another factor that causes choice friction in the market is inertia. Consumers become willing to remain in the same plan, despite potentially having choices that are better for them. In this paper, I will examine a potential driving force of these phenomenon as well as the trade-off between them. This paper aims to answer the question of how does the number of plans offered on the health insurance exchanges, created by the Affordable Care Act, affect rates of inertia and adverse selection. This relationship has been studied before (Handel 2013, Saltzman, et al., 2021), but not in terms of the number of choices available.

This research has important policy implications as it may show that increased choice and competition, which the classical economic position holds to be a positive, may lead to an overall decrease in welfare and utility for consumers, dependent on the trade-off value of adverse selection versus inertia. By being able to identify one factor that reduces some friction and causes another, it allows policy makers to have more information to have a targeted approach in examining inertia and adverse selection. As I mentioned, choosing the right healthcare plan can be very difficult, so it is important to study all aspects of what makes it confusing so that policy can be well suited to give consumers the ability to make the best possible decision for them and their family. I want to expand on the prior research examining causes of friction in healthcare markets (Handel and Kolstad, 2015).

1.2 Background on the Affordable Care Act and the Exchanges

Through the Affordable Care Act (ACA), consumers have been given more choices in health insurance plans compared to prior to the ACA through access to the Exchanges. The ACA Exchanges are health insurance marketplaces in each state where the plans are subsidized by the Center for Medicare and Medicaid Services (CMS). Each state can have multiple marketplaces which are divided geographically by rating areas. Consumers are offered plan choices determined by their zip code, although typically this is merely a subset of a rating area. It does occur though when an insurer may only offer plans to some zip codes in a rating area, or an instance when a zip code spans over more than one rating area. For this purposes of this paper, I will be using rating areas as an approximation of the choice set of plans that consumers face. In these Exchanges, there are multiple providers that offer different varieties of plans by "metal" tiers that correspond to an actuarial value (90% Platinum, 80% Gold, 70% Silver, 60% Bronze).

The Exchanges were intended to provide consumers with the ability to easily compare plans between insurers and coverage level, as well as offering more affordable plans. With more choices and plans, this can lead to a phenomenon of choice overload. In this paper I investigate the effect of choice overload on adverse selection and inertia on the ACA Exchanges.

1.3 Choice Overload

Choice overload is a phenomenon that occurs when an individual has a plethora of choices that result in people having difficulty picking an optimal choice. In the classical view of economics, more choices are always better, though we now realize this is not always the case. Choice overload can typically result in instances of decision fatigue or the unwillingness to make a choice, in the case of this paper, that would likely result in staying in the same plan. There is also evidence that indicates that over complicated plans, sometimes due to more choices, results in worse decision making (Loewenstein, et al., 2013).

1.4 Adverse Selection

Adverse selection occurs when there is asymmetric information between the consumer and supplier. In the case of health insurance, the consumer is aware of their health condition whereas the insurer is not privy to that same information, outside of factors such as smoking, age, and gender. Prior research has shown that selection occurs in different healthcare markets including from employer sponsored plans (Einav, et al., 2010, Handel, 2013) as well as on the exchanges (Saltzman, et al., 2021). The ACA also made it so insurers cannot deny consumers based on preexisting conditions and can only change premiums based on age, location, tobacco use, plan, and individual or family plan (HealthCare.gov). This makes it difficult for insurers to properly price in adverse selection as they can not perfectly price discriminate. This condition was expected to increase adverse selection so the individual mandate was also implemented to prevent consumers from going uninsured. Although this was in order to prevent some adverse selection, it does not prevent inter-plan adverse selection. Insurers do price into their premiums the anticipation of adverse selection though in order to preemptively combat it, although this is not enough. In addition to the individual mandate, firms that participate in the exchanges are subject to risk adjustment transfers. Each year, each firm is given a risk score based on their enrollee pool for the year. The insurers with the plans that have the highest risk scores are then compensated by having the firms with lower risk scores pay them a proportional amount. These are the risk adjustment transfers put in place to incentivize firms to stay on the exchanges and lower variance of having a riskier pool.

Adverse selection can only occur if the consumer correctly utilizes their asymmetrical information. When there are many choices, it becomes increasingly likely that consumers will choose sub-optimal plans for their health (Loewenstein, et al., 2013). With that, I expect that adverse selection should increase as the number of choices increases, and then at a certain point, choice overload would take effect and decrease adverse selection. This is because at first, an increase in the number of plans should allow consumers to better utilize different plans for their own healthcare needs. Then, if there are too many plans, consumers may have difficulty in selecting optimal plans. So, any kind of selection should not take effect as the consumers are not utilizing their asymmetrical information to the best of their abilities. Adverse selection reduces consumer welfare overall as it leads to insurers raising premiums to account for it, and could potentially lead to a death spiral. This leads to a trade-off, opting into a better plan, which may lead to an increase in adverse selection, or sub-optimal decision making. This is why I will be demonstrating how adverse selection increases with the number of choices, followed by a decrease when it becomes more difficult to make an informed decision. If this happens, then there is the unfortunate situation where consumers are getting the worst of both worlds, where insurers are anticipating adverse selection and increasing premiums, as well as consumers choosing worse plans for their healthcare needs.

1.5 Inertia

Inertia in health insurance is the phenomenon where consumers do not change their health insurance plan. Inertia tends to reduce consumer welfare and may account for one of the largest factors that increases premiums (Saltzman, et al., 2021, Ericson, 2014). Prior research has found that there is heavy evidence of inertia in the California ACA Exchange (Drake, 2022, Saltzman, et al., 2021). There are also several possible explanations for inertia such as inattention and hassle costs (Drake, 2022). I intend to add another possibility to this idea with choice overload being a factor in inertia. This is also a possibility as it has been shown that consumers may not fully understand their own insurance (Garnick, D. W., et al., 1993), so it may be that consumers will prefer their own plan again because it may be difficult to compare it to many other plans.

Inertia also has an inverse relationship with adverse selection (Handel, 2013). This is due to the fact that when inertia is reduced, either by consumers forced to change or by willingness to change, consumers are then more likely to pick better plans for themselves which increases adverse selection. This is also consistent with my hypothesis. If more choices decreases adverse selection, it should subsequently decrease inertia. There is some prior research that indicates that when presented with more options within an alternate plan that consumers are more likely to switch, implying that choice overload may not be a very strong factor (Ketcham, et al., 2015). The Ketcham paper differs though as it compares the willingness to switch plans between a plan with less options and a plan with more options, as it is discussing Medicare Part D rather than traditional insurance plans such as on the exchanges. Other research in Medicare Part D has found that reducing switching costs to reduce inertia creates an increase of consumer surplus of upwards of 20-30% of the total cost of Medicare Part D annual spending per capita (Polyakova 2016).

1.6 Contributions

My research intends to contribute to the literature in three ways. The first and second contributions are to study another possible cause of adverse selection and inertia. Although there has been research that identifies inertia's and adverse selection's relationships (Handel 2013, Saltzman, et al., 2021), there is little literature on attempting to identify the mechanisms that cause inertia and adverse selections, and their relationship, especially within the ACA Exchanges. Roughly 35 million Americans get their insurance through the exchanges, so it is extremely important to analyze these markets (HHS.gov). Inertia can cost consumers a total of roughly a billion dollars in the California market place, so it is critical to study the possible reasons that cause it in order to limit this welfare loss.

In addition to the above, this paper will be one of the first to try to measure adverse selection on the ACA Exchange by using risk adjustment payments as measured by the CMS. Adverse selection is assumed to be present in most markets, and can be measured sometimes through trying to find exogenous premium variation (Panhans, 2019), but this is not doable in all, or even few, markets. This methodology should be applicable to any ACA Exchange in the country at the state level.

2 Methodology

2.1 Data

For this paper, I require two different final data sets, one to study adverse selection and one for inertia. In both of the following models, the subscript m refers to market, t refers to the year, and s represents state. All data is publicly available and was compiled and cleaned in R.

2.1.1 Adverse Selection

The datasets that I am using to study adverse selection are public use risk adjustment data files from the CMS merged with demographic data from the exchanges, which are also publicly accessed from the CMS. I then had to drop some states due to either a lack of risk adjustment data, there being a monopoly in the exchange for a state (resulting in no risk adjustment transfers), or there is a lack of demographic data collected by a state. After this I was left with 47 states' risk adjustment and demographic data from the years of 2015-2019 (each of the 47 states are not represented in each year). I then used the Robert Wood Johnson Foundation HIX Compare data to calculate the average number of plans per market per state over the same number of years. To do this, I summarized the number of plans while grouped by years and states, and then divided that by the number of markets within each state to calculate the average number of plans per market. I also calculated the number of insurers per market per year the same way. In total, it required 15 different data sets merged together to create my final dataset to measure adverse selection. It comes out to a total of 257 observations (state year pairs).

Table 1 demonstrates some of the summary statistics for the adverse selection dataset. The variable "Risk Adjustment Sum Per Capita" was made by first summing the absolute value of each insurer's risk adjustment transfers by state and year. I then divided that sum by two to account for double counting the transfer from one firm to then be received by another. Lastly, I divided this sum by the number of enrollees

Table 1: Summary Statistics for Adverse Selection

	Risk Adjustment Sum Per Capita	Number of Plans	Total Enrollees	Number of Insurers
	Min. : 0.3571	Min. : 3.50	Min. : 16947	Min. : 1.000
	1st Qu.: 138.0356	1st Qu.: 19.33	1st Qu.: 65676	1st Qu.: 3.000
	Median : 247.0873	Median : 26.44	Median : 153020	Median : 5.000
	Mean : 271.3748	Mean : 32.30	Mean : 246582	Mean : 6.741
	3rd Qu.: 364.7377	3rd Qu.: 41.11	3rd Qu.: 243382	3rd Qu.:10.000
	Max. :1372.8194	Max. :155.12	Max. :2120350	Max. :23.000

Table 2: Summary Statistics for Inertia

	Rate of Inertia	Number of Plans	Total Enrollees
	Min. :0.0000	Min. : 4.00	Min. : 0
	1st Qu.:0.4823	1st Qu.: 15.00	1st Qu.: 277
	Median :0.6084	Median : 24.00	Median : 546
	Mean :0.5806	Mean : 30.49	Mean : 2914
	3rd Qu.:0.7018	3rd Qu.: 38.00	3rd Qu.: 1347
	Max. :1.0000	Max. :155.00	Max. :261066
	NA's :390	NA's :306	NA's :367

in a state to give the final value of the risk adjustment sum per capita which I use in the rest of this paper to measure adverse selection across markets within a single state.

2.1.2 Inertia

In order to measure inertia, I used CMS public use files (PUFs) which contain the same demographic data as before, as well as data on the number of people who stay in the same plan, or stay in a plan that was automatically turned into another. This data though is at the county level. I then used a crosswalk from county to rating area to create a dataset at the market level. Not all states have an exact county to rating area match as some use zip codes, such as California, so for the sake of this paper, all states whose rating areas are made up of geographical regions besides counties are dropped. I use this proportion of the number of people staying in a plan divided by the total number of active re-enrollees as my measure of inertia for this paper. This data was also merged with the Robert Wood Johnson Foundation HIX (RWJF HIX) in order to count the number of plans per market. Similarly to the adverse selection data, I summarized the RWJF HIX data by the number of plans by market (rating area) and year. Unlike risk adjustment, I was able to measure inertia at the market level. I then merged this plan level data with market level data on demographics and inertia. Unfortunately, there is less data on consumers switching plans as CMS only started collecting this data in 2018. This data is also only available in 35 states that use the HealthCare.gov platform rather than their own state-based platform. This comes out to 973 observations from 2018 to 2021.

2.2 Econometric Model for Adverse Selection

$$AdverseSelection_{st} = \beta_0 + \beta_1 NumberOfPlans_{mt} + \beta_2 NumberOfPlans^2_{mt} + \beta_3 Demographic_{st} + \beta_4 FixedEffects$$

By using this model, I intend to find the amount of adverse selection as a function of the average number of plans in a market per state, while controlling for the number of insurers and demographic data such as age and race. As previously mentioned, I measure adverse selection as the absolute value sum of all risk adjustment data per state and divide that by two in order to not double count the transfers to and from firms. This is then divided by the number of enrollees per state to get an accurate per capita measurement of risk adjustment. Risk adjustment transfers are a suitable measurement of adverse selection as risk adjustment transfers are the payments or receipts mandated by the ACA exchanges which depend on their enrollee pool. Firms with sicker enrollee pools receive payments while firms with healthier firms pay. This is to incentivize firms to stay in these markets and disincentivize firms from attempting to select for only healthy populations. Although there are typically multiple markets per state, these transfers are at the state wide level. Because of this, I had to divide the total number of plans in a state by the number of markets to calculate the estimated levels of adverse selection.

The reason that risk adjustment transfers can function as a measurement of adverse selection is that if inter-plan adverse selection is taking place in a market, then we should see a large number of risk adjustment transfers as individuals self select into the plans best for them, causing some insurers to have higher risk pools. Unfortunately, these transfers are only between firms. This means we do not see the total effect of adverse selection between plans within the same firm. Rather, this model captures the adverse selection between firms based on the number of plans available in the market.

2.3 Econometric Model for Inertia

$$Inertia_{mt} = \beta_0 + \beta_1 NumberOfPlans_{mt} + \beta_2 NumberOfPlans^2_{mt} + \beta_3 Demographic_{mt} + \beta_4 FixedEffects$$

This models inertia as an output of the number of plans and demographic data. Inertia is measured in this paper as a percentage of the share of active re-enrollees on the exchange that stayed in the same plan as the previous year. For the same reason as I did with my previous model, I look at the number of plans squared as a way to introduce the possible effects of choice overload in the markets with higher numbers of plans. This model does not take into account those who do not stay within the exchange each year.

3 Results

3.1 Adverse Selection

Table 3 demonstrates the results of my regression of the first econometric model specified above, in regards to adverse selection. As you can see, there is actually a positive coefficient for the number of plans on risk adjustment transfers. This means that as the average number of plans per market increases, the risk adjustment transfers for that state increases by $5 per enrollee. In some markets this means that risk adjustment transfers are increasing by $9,201,848 per increased plan. This is also significant at the .001 level when controlling for demographic data as well as fixed effects for states and years, as well controlling for the number of insurers. I also looked at the number of plans squared to take into account choice overload where there are a much higher number of plans, and as we see the coefficient is also statistically significant, but it is negative. This then implies that at a certain point, in this model it is at 58 plans, an increased number of plans reduces adverse selection. This seems to be where choice overload becomes a factor and enrollees do not make optimal decisions. Although it is possible that there is another explanation for this phenomenon, at this point, choice overload seems like the most reasonable explanation. This though is not extremely important as only 8.5% of markets have more than 58 plans within the years and states that were used in this study. These results are not what I had initially theorized when I first developed this research question, but they make sense in the context of the utilization of asymmetric information. From these results, it seems as though consumers are fairly capable at utilizing their health information and can then make better choices by having more choices available to them. I would assume this is due to the fact that if there are few plans, consumers are less likely to find a plan that best fits their needs. When there are a many plans, while it may become more difficult or laborious to compare them, consumers are able to find the plan that may be more specialized to their own expected healthcare needs.

These results also are robust with several different fixed effects as seen in the table. In addition to this, while regressing the adverse selection measurement by the number of insurers and the number of insurers squared, there are no statistically signifigant coeficients at all. This shows that the number of plans plays a larger role in adverse selection between plans than the number of insurers.

Table 3: OLS Estimates of Adverse Selection with Different Fixed Effects

	No Fixed Effects	State	Year	State and Year
Number of Plans	4.144 *	3.461 +	5.614 +	5.604 **
	(1.957)	(1.872)	(2.475)	(1.974)
Number of Plans^2	-0.039 +	-0.040 *	-0.046 +	-0.047 **
	(0.021)	(0.016)	(0.023)	(0.015)
N	257	257	257	257
R^2	0.20	0.58	0.29	0.65

Figure 1 then shows the plot of risk adjustment sums per capita by the number of plans with the function of the coefficients of the number of plans and number of plans squared. Any observation that is past the midpoint of the parabola would then be a marketed with choice overload. It is clear to see how most markets do not suffer choice overload.

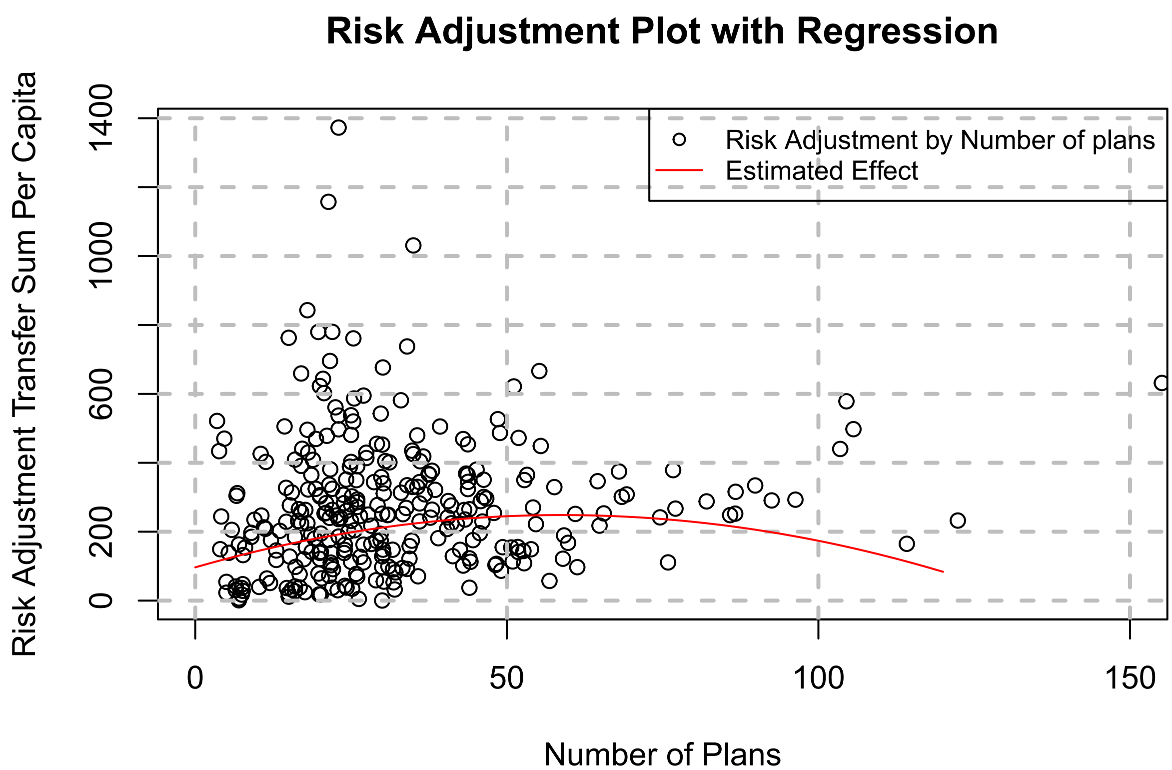

Figure 1: Risk Adjustment Plot with Regression

I also ran a regression where I weighted the number of plans in each market in the state. The results are still statistically significant and in the same direction as the previous results, although they are less strong estimators. The problem with this dataset is that there are half as many observations as there is only county-level data for 33 states. Overall, the results did not show any deviations from the larger dataset, but, it still shows the robustness of my results.

3.2 Inertia

In these results for inertia, I found results consistent with Benjamin Handel's paper on inertia and adverse selection. Inertia in this case decreases as the number of plans increase, which is the opposite of adverse selection. This implies that as the number choices increases, individuals become more likely to switch plans each year. This makes intuitive sense as if there is ever a single plan then naturally inertia would be 100%, so as consumers gain choices, their willingness to switch also increases. Similar to adverse selection though, there is a point at which choice overload takes effect. This seems to be around 70 plans. There are very few markets though that have over 70 plans which implies that choice overload is not a factor in inertia. As table 4 indicates, inertia decreases at a rate of around 1% for each number of plan added to a market. Along with the number of plans squared variable, these results are statistically significant with p-values of 2.4032e-08 and 9.2266e-08 respectively. Table 4 also shows the results with different fixed effects, once again showing the robustness of the results. Each of these regressions were also weighted by population of each rating area.

These results show that consumers are more willing to switch when they have more choices, implying that the number of choices available is not a source of friction or an inefficiency (in terms of inertia) up to a certain point. This is explained similarly as with adverse selection. If there are more plans on a market, consumers are are more likely to shop for alternative options, especially if they are dissatisfied with their current plan. When there are many other choices, there are that many more reasons to switch.

Table 4: OLS Estimate of Inertia

	No Fixed Effects	State	Year	State and Year
Number of Plans	−0.006 01 ***	−0.008 51 ***	−0.007 06 **	−0.009 98 ***
	(0.000 59)	(0.001 53)	(0.001 10)	(0.001 38)
Number of Plans^2	0.000 04 ***	0.000 06 ***	0.000 05 **	0.000 07 ***
	(0.000 01)	(0.000 01)	(0.000 01)	(0.000 01)
N	973.00	973.00	973.00	973.00
R^2	0.61	0.71	0.67	0.77

Figure 2 shows a scatterplot of the rate of inertia per market by the number of plans within that same market. The parabola shows the results of my regression demonstrating how inertia is affected by the number of plans. As shown before, this plot displays the fact that few markets face any choice overload in terms of inertia.

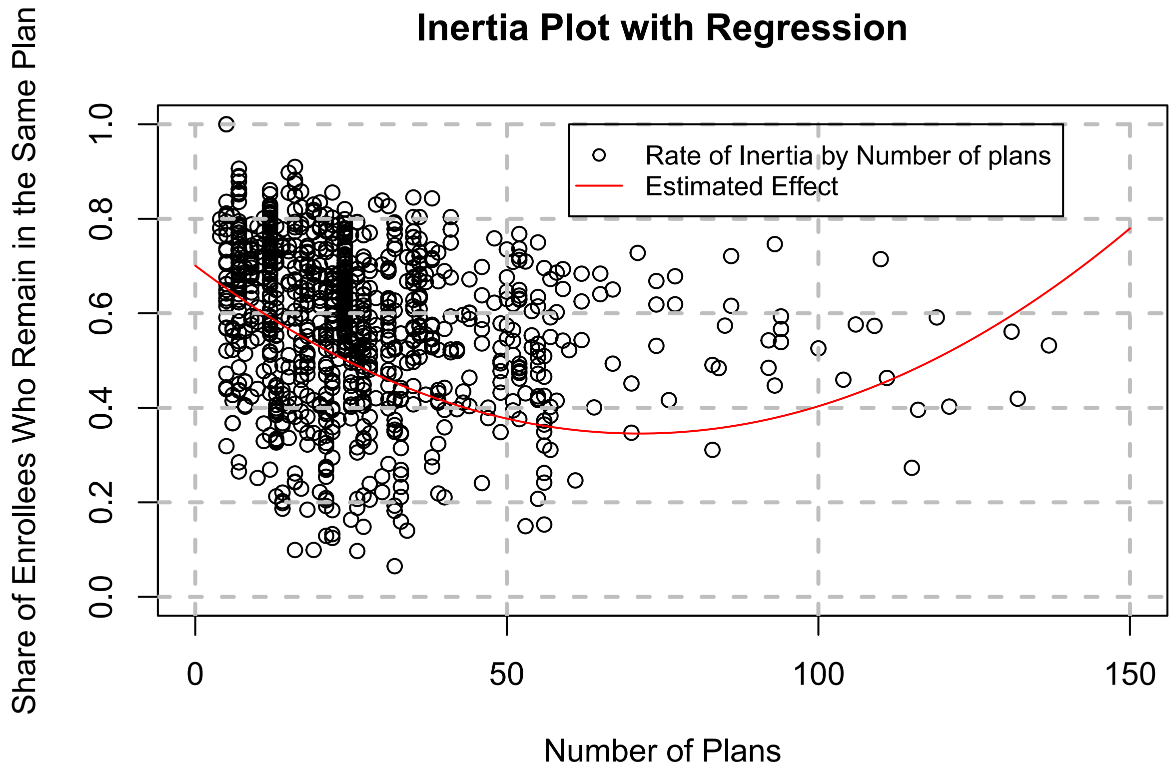

Figure 2: Inertia Plot with Regression

4 Conclusion

4.1 Limitations and Future Research

This paper was certainly limited in its scope. Due to the data I had access to, I was not able prove any form of causality the number of plans has on either adverse selection or inertia, but rather just identifying the relationship. This data was limited in that I was only able to merge demographic data with risk adjustment data, as well as number of plans. It is certainly possible that there are some other factors that are correlated with the number of plans that has a direct effect on adverse selection or inertia. For example, as seen from Handel's seminal paper, reducing inertia increases adverse selection. So, since my work shows that inertia is correlated with the number of plans, it is very well possible that the only reason that the number of plans affects risk adjustment payments and thus adverse selection is actually through inertia and not plan choice itself. Therefore, it is possible that the number of plans functions more as an instrumental variable to adverse selection rather than a covariate itself.

Future research could improve on this by finding some exogenous shock on the number of plans, while also holding the number of insurers constant. Another possible approach would be a border strategy. For example comparing the difference between groups that live on the border of a rating area, where the only difference in population would be which market they have access to, and thus number of choices. Even this though may still be difficult to prove causality as there are other potential changes that may occur between rating areas. I would also want to improve on this research by to analyze the utility gained from the possibility of having more choices. With the information from this paper, we see that there are benefits (a reduction in inertia, more choices) and drawbacks (an increase in adverse selection) to an increase in the number of plans. There then must be some optimal number of plans in terms of consumer utility. Another potential area for research could be the rates of insurance satisfaction with consumers based on the number of plans available. On one hand, it is possible that with more plans, that after some time consumers will settle on the plan best for them. It is also possible that as seen from the inertia results, that those with fewer choices may be more satisfied due to a dearth of alternatives.

4.2 Discussion

The goal of the Affordable Care Act (ACA) was to allow consumers to be able to pick an affordable plan off a state-run exchange instead of needing health care through an employer. With this came the worry of only those with higher risk taking these plans, which led to the risk adjustment transfer system to incentivize insurers to remain on the market. In theory, enrollees should then be shielded from adverse selection as insurers become reimbursed through these transfers from other insurers. On the other hand, there are not any programs that reduce inertia on the state exchanges, which then leads to insurers having immense market power to raise their prices, purely because people do not switch (Saltzman, et al., 2021). If this is the case, then from a consumer welfare point of view, increasing plans appears to have the greatest welfare increase, at least on the exchanges. This should reduce inertia and increase choice. Adverse selection increasing then should not become a burden on the consumers and an increase in adverse selection here just means that consumers are better able to utilize their information. If prices are not increasing on the exchanges due to adverse selection, because of the risk adjustment transfers, then an increase of adverse selection for consumers is a positive.

From both of my regressions, it seems that choice overload only becomes a factor somewhere around 60-70 plans. While my methodology was not rigorous to have a better approximation of what the optimal number of plans is, it appears that most exchanges can bear to add plans without reducing consumer welfare. This seems to be agree with the previous research conducted on Medicare Part D that showed that more choices will actually increase switches rather than reducing (Ketcham, et al. 2015). From a policy standpoint, this evidence could show that there is a reason to have insurers offer more plans, as well as wanting more competition within markets. Prior research already shows that inertia seems to be more harmful than selection (Polyakova 2016). From my research, if we assume it is true that inertia has a larger negative effect on welfare than selection, then increasing the number of plans on a market, to a point, should be optimal.

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6 Appendix

Table 5: OLS Estimates of Adverse Selection with Different Fixed Effects

	No Fixed Effects	State	Year	State and Year
Intercept	178.740 ***			
	(38.559)			
Number of Plans	4.144 *	3.461 +	5.614 +	5.604 **
	(1.957)	(1.872)	(2.475)	(1.974)
Number of Plans²	−0.039 +	−0.040 *	−0.046 +	−0.047 **
	(0.021)	(0.016)	(0.023)	(0.015)
Age < 18	0.002	0.002	0.002	0.001
	(0.002)	(0.004)	(0.001)	(0.003)
Age 18 - 25	−0.016 **	−0.013	−0.012 **	−0.009
	(0.005)	(0.010)	(0.003)	(0.007)
Age 26 - 34	0.008 *	0.002	0.008 *	0.005
	(0.004)	(0.007)	(0.003)	(0.007)
Age 35 - 44	−0.008	−0.001	−0.013 ***	−0.004
	(0.006)	(0.009)	(0.002)	(0.010)
Age 45 - 54	0.009 **	0.004	0.009 **	−0.001
	(0.003)	(0.007)	(0.002)	(0.007)
Age > 64	0.031 **	0.031 **	0.031 **	0.022 *
	(0.010)	(0.010)	(0.008)	(0.009)
American Indian/Alaskan Native	0.002 +	0.001	0.002 ***	0.001
	(0.001)	(0.001)	(0.000)	(0.001)
White	−0.001 +	0.000	−0.002 *	−0.001
	(0.001)	(0.001)	(0.000)	(0.001)
Native Hawaiian/Pacific Islander	−0.001 +	0.000	−0.001 **	−0.001
	(0.001)	(0.001)	(0.000)	(0.001)
Multi-Racial	−0.003 ***	−0.002 *	−0.001 **	−0.001
	(0.001)	(0.001)	(0.000)	(0.001)
Asian	−0.001	−0.001	−0.001	0.000
	(0.001)	(0.002)	(0.001)	(0.001)
Unknown Race	0.001	0.000	0.001	0.001
	(0.001)	(0.002)	(0.001)	(0.001)
Number of Insurers	4.125	15.748 ***	−0.355	8.499
	(4.773)	(3.974)	(4.068)	(5.929)
N	257	257	257	257
R^2	0.20	0.58	0.29	0.65

Table 6: Weighted OLS Estimate of Adverse Selection

	(1)
Weighted Number of Plans	3.392
	(1.603)
Weighted Number of Plans^2	-0.016
	(0.007)
Age < 18	0.006
	(0.003)
Age 18 - 25	-0.015
	(0.012)
Age 26 - 34	0.011
	(0.011)
Age 35 - 44	-0.008
	(0.012)
Age 45 - 54	-0.009
	(0.011)
Age > 64	0.053
	(0.014)
American Indian/Alaskan Native	0.004
	(0.002)
White	0.001
	(0.002)
Native Hawaiian/Pacific Islander	0.002
	(0.001)
Multi-Racial	0.001
	(0.001)
Asian	0.002
	(0.002)
Unknown Race	0.000
	(0.002)
Num.Obs.	152
R2	0.700
R2 Adj.	0.542
R2 Within	0.166
R2 Within Adj.	0.040
AIC	1896.2
BIC	2056.4
RMSE	87.34
Std.Errors	by: ST
FE: ST	X
FE: YEAR	X

Table 7: OLS Estimates of Inertia with Different Fixed Effects

	No Fixed Effects	State	Year	State and Year
(Intercept)	0.704 85 ***			
	(0.012 72)			
planNum	−0.006 01 ***	−0.008 51 ***	−0.007 06 **	−0.009 98 ***
	(0.000 59)	(0.001 53)	(0.001 10)	(0.001 38)
planNum2	0.000 04 ***	0.000 06 ***	0.000 05 **	0.000 07 ***
	(0.000 01)	(0.000 01)	(0.000 01)	(0.000 01)
Age < 18	0.000 01	0.000 01	0.000 01	0.000 01
	(0.000 01)	(0.000 02)	(0.000 01)	(0.000 01)
Age 18-25	−0.000 03 ***	−0.000 06 **	−0.000 02	−0.000 04 **
	(0.000 01)	(0.000 02)	(0.000 02)	(0.000 01)
Age 26-34	−0.000 03 **	0.000 00	−0.000 01 *	0.000 01
	(0.000 01)	(0.000 02)	(0.000 00)	(0.000 01)
Age 35-44	0.000 08 ***	0.000 04 *	0.000 02 +	−0.000 02
	(0.000 01)	(0.000 02)	(0.000 01)	(0.000 02)
Age 55-64	0.000 00	−0.000 02 **	0.000 00	−0.000 02 *
	(0.000 00)	(0.000 01)	(0.000 00)	(0.000 01)
Age > 65	0.000 10 ***	0.000 23 *	−0.000 02	0.000 08
	(0.000 03)	(0.000 09)	(0.000 04)	(0.000 08)
Male	−0.000 03 ***	−0.000 03	−0.000 01	0.000 00
	(0.000 01)	(0.000 02)	(0.000 01)	(0.000 02)
American Indian / Alaska Native	−0.000 42 ***	−0.000 32	−0.000 58 +	−0.000 61
	(0.000 11)	(0.000 46)	(0.000 24)	(0.000 45)
Asian	0.000 04 ***	0.000 03	0.000 03 ***	0.000 02
	(0.000 01)	(0.000 02)	(0.000 00)	(0.000 02)
White	0.000 02 ***	0.000 02 *	0.000 01	0.000 01
	(0.000 00)	(0.000 01)	(0.000 01)	(0.000 01)
Native Hawaiian / Pacific Islander	0.001 78 ***	0.000 96	0.001 89 ***	0.001 46 +
	(0.000 35)	(0.000 74)	(0.000 12)	(0.000 75)
Other Race	−0.000 05 *	−0.000 01	0.000 01	0.000 05 *
	(0.000 02)	(0.000 03)	(0.000 01)	(0.000 02)
Multiracial	−0.000 19 ***	−0.000 20	−0.000 19 +	−0.000 21
	(0.000 05)	(0.000 19)	(0.000 06)	(0.000 16)
Unknown Race	0.000 01 ***	0.000 01 *	0.000 01 +	0.000 01
	(0.000 00)	(0.000 00)	(0.000 00)	(0.000 00)
N	973.00	973.00	973.00	973.00
R^2	0.61	0.71	0.67	0.77