

**Attempts to Socialize Insurance Costs in Voluntary Insurance Markets:  
The Historical Record**

Dwight K. Bartlett, III, FSA  
Principal  
Bartlett Consulting

Robert W. Klein, Ph.D.  
Associate Professor of Risk Management and Insurance  
Georgia State University

David T. Russell, Ph.D.  
Assistant Professor of Insurance  
Illinois State University

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### **Abstract**

Regulators often attempt to socialize insurance costs by limiting premium differences between low and high-risk policyholders. Some insurance programs such as Social Security socialize program costs through compulsory, non risk-based contributions for the vast majority of workers. Voluntary insurance markets, however, allow individuals or groups to opt out. Would-be insurance buyers can choose self-insurance or some alternative form of risk management if they believe they are being asked unfairly to subsidize others. The migration of low-risk policyholders from socialized insurance mechanisms ultimately causes these mechanisms to break down.

This does not mean that socialization of insurance costs is impossible, but history provides some important lessons. The purpose of this paper is to look at some examples in the historical record where efforts to socialize have clearly failed and explain why these efforts failed. Examples of socialization failures from the historical record include community rating by Blue Cross organizations in their early years (pre-1950s), assessment life insurance societies, and attempts at socialization of automobile insurance in Michigan. In one way or another, these methods of spreading risk across policyholders broke down once the market found mechanisms by which low-risk policyholders could avoid subsidizing high-risk insureds.

### **Introduction**

Governments often attempt to socialize insurance costs by constraining rate differences between low and high-risk insureds. Insurers competing in private markets are sometimes compelled by regulation to charge uniform or adjusted prices that do not fully reflect observable differences in risk among insureds.<sup>1</sup> The objective is to lower premiums for high-risk individuals. Under certain circumstances, private insurers also may voluntarily attempt to implement uniform insurance prices to promote particular organization or social objectives other than profit

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<sup>1</sup> In this article, the terms “socialized costs,” “uniform prices,” “adjusted prices” and “cross subsidies” refer to the same phenomenon. The important distinction is that, under socialization, prices do not vary commensurately with the risk of the insured. Rather, all insureds are charged the same rate regardless of their relative risk, or price differences are tempered to be less severe than observable differences in risk.

maximization. What is common and interesting in each of these cases is that cost socialization is attempted in private insurance markets with voluntary transactions.

Socialization is promoted and justified on various grounds. Its proponents tend to believe that an equal sharing of insurance costs among individuals is fairer than one based on individuals' relative risk or the benefits they receive. Sometimes it is argued that risk-based prices will hurt low or middle-income individuals or that there is a limit to what someone should pay for insurance, regardless of their risk and economic resources. Another justification offered is that risk-based prices will discourage some individuals from buying insurance, contrary to the public interest. A corollary argument is that premiums should be "affordable" for everyone when the government compels individuals to buy insurance.

From a normative perspective, there are challenges to each of these arguments for socialized insurance pricing and there are different views on what constitutes "equity."<sup>2</sup> However, this article sidesteps the question of what is **fair** and addresses the question of what is **possible**. We focus on the problems encountered by governments and other entities in attempting to socialize insurance costs in voluntary, private markets. Regardless of the underlying motivation for socialized pricing, market forces often undermine the objectives of its engineers and/or create other problems.

Socialization is most feasible when the intended participants are legally compelled to participate in an insurance scheme and the insurance is administered by a single entity with no competitors. The entity may be the government itself or an insurer with an exclusive government

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<sup>2</sup> Departures from risk-based pricing encourage moral hazard and adverse selection, which impair market efficiency. Also, artificial constraints on insurers' rate structures typically are not "means-tested" and may compel low-income consumers to subsidize high-income consumers. A notion of equity consistent with economic efficiency is that insureds should pay a price commensurate with the benefits they receive from insurance, i.e., the amount of risk protection. This contrasts with notions of equity based on the "ability to pay" or the view that everyone should pay the same price, regardless of their risk.

charter. Some degree of socialized pricing also may be possible when a private insurer is insulated from competition or its profits and equity are subject to expropriation by government. Furthermore, socialization may persist within an organization that, among other benefits, includes insurance if participants in that organization believe that the overall benefits of group participation exceed the costs of socialization. However, it is much more difficult to socialize insurance costs when individuals can choose among competing insurers or opt out of an insurance scheme. When low-risk individuals are informed and have a choice, they will avoid subsidizing high-risk individuals. Insurers also will avoid expropriation by attempting to circumvent regulatory constraints or withdrawing from a market if necessary.

This article reviews several historical examples where attempts to socialize insurance costs have clearly failed and explains why they failed. The examples we have chosen are: 1) assessment life insurance; 2) community rating of health insurance; and 3) restrictions on territorial rating in auto insurance. We also comment on other related efforts to constrain risk-based pricing and underwriting. Despite the implications of economic theory and historical experience, many decision-makers operate under the illusion that is feasible to socialize insurance costs if there is a desire to do so. These three case studies should help to dispel this illusion.

## **Socialized Pricing and Market Forces**

### *Social Insurance*

The best example of a socialized insurance scheme in the United States is the Social Security system. Most workers are required by federal law to contribute a uniform percentage of their wages, within certain limits, for Old Age, Survivors and Disability Insurance (OASDI). Workers' contributions

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(and the matching contributions of their employers) are not adjusted for differing risk factors such as age, sex, family composition, medical history, etc.<sup>3</sup> Low-risk workers cannot opt out of the system, except by refusing to work or receiving untaxed compensation “under the table.” While Social Security is facing growing financial problems, these problems are not inherent to its socialized contribution scheme. A mandatory social security system is workable if it is structured properly and it has strong political support, even if participants’ contributions (or benefits) are not based on their relative risk.

### *Private Insurance Markets Under Regulation*

The situation is different for voluntary, private insurance systems. In theory, if individuals have a choice and are knowledgeable about their options, they will select an insurer that offers them the lowest price for a given service, all else equal. In turn, competition will induce insurers to charge a price commensurate with an insured’s risk and benefits (Harrington and Doeringhaus, 1993). People will only buy insurance if it increases their expected utility.<sup>4</sup> In sum, insurers and low-risk individuals would be expected to try to circumvent government constraints on pricing intended to create cross subsidies for high-risk insureds in allocating the burden of insurance costs.

However, in the real world, certain imperfections in insurance markets may permit some cross subsidies to be imposed, at least for a period of time. The ability to cross subsidize depends on the structure of a market and the cross subsidy mechanism. Cross subsidies for high-risk insureds must be funded either by low-risk insureds and/or owners of insurance companies. Regulators may be able to

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<sup>3</sup> Benefits are also “loosely” tied to income, meaning that high-wage workers tend to subsidize low-wage workers.

<sup>4</sup> According to economic theory, individuals will purchase insurance if it increases their utility. Rational, risk-averse individuals will even be willing to pay a “risk premium” for insurance, i.e., they will be willing to pay a premium that exceeds their expected loss (see Varian, 1992). Consequently, risk-averse individuals may be willing to participate in insurance schemes that force them to subsidize other insureds. However, there is a limit to the risk premiums that

exploit conditions that insulate insurers from competition and expropriate their potential excess profits to fund cross subsidies. Structural factors that facilitate cross subsidization of this nature include entry and exit barriers, market power, special cost advantages, the value of firm reputation, switching costs for consumers, and constraints on consumer information. Under these conditions, low-risk insureds ultimately bear the cost of such cross subsidies.

It also may be possible for the government to impose cross subsidies even when insurers are not insulated from competition. In this instance, owners of an insurer (including policyholders of a mutual company) must be willing to relinquish a portion of the normal profits and/or equity of the insurer. This requires some barriers to exit from the market that subject an insurer to expropriation (Harrington, 1992).

There may be several reasons why an insurer would find it difficult to or be reluctant to exit a market. First, states generally impose prior notice requirements for policy terminations and may enact more severe restrictions on policy terminations, underwriting selection and exit. Insurers also may lose economies of scope in cross marketing multiple insurance products if they withdraw from a particular line. Further, insurers will have some sunk costs in establishing operations in a particular state that they will lose if they withdraw. Regulators also may raise the cost of exit by requiring an insurer to withdraw from all lines, not just the market where price constraints are imposed (Harrington, 1992; and Tennyson, 1997). Insurers will balance the cost of regulatory constraints against the costs of exit. Their calculations also will consider the prospects for changes in regulatory policies in the future. Hence, regulators may be able to expropriate the profits and equity of insurers to support cross subsidies for a

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individuals will be willing to pay, and, hence, there is a limit to the cross subsidies (plus insurers' expense and profit loadings) individuals will be willing to pay to obtain insurance.

considerable period of time but not indefinitely if insurers are ultimately driven to withdraw from a state.

### *Mechanisms for Imposing Cross Subsidies*

Constraints are commonly imposed on individual insurers' rate structures rather than through administered pricing systems where all insurers have to use the same set of prices.<sup>5</sup> Insurers in the same market will vary somewhat in terms of their policy provisions, quality of service, underwriting standards, rates and other characteristics. If regulators attempt to constrain risk-based pricing, they will typically limit the differences in the insurer's rates among different risk classes, and may or may not suppress an insurer's overall rate level as well.<sup>6</sup> Constraints on risk-based pricing also may be attempted through regulations prohibiting the use of certain risk classification criteria (e.g., gender) for pricing purposes.

Additionally, the government may ban or limit the use of certain risk factors for the purpose of underwriting selection, e.g., gender or marital status. Insurers' prices and underwriting criteria are closely intertwined. In practice, insurers often differentiate themselves through their underwriting standards. "Preferred" insurers have the most stringent underwriting standards and tend to offer the lowest rates. "Standard" and "non-standard" insurers have less stringent underwriting standards and charge higher rates. In this way, self selection among individuals and competition among insurers will tend to result in market outcomes where insureds pay premiums commensurate with their relative risk.

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<sup>5</sup> The term "rate structure" refers to the set of rates that an insurer charges for different risk classes.

<sup>6</sup> Regulators may simply compress the differences among rates for different risk classes but not suppress the overall rate level below the average cost for all insureds. Alternatively, regulators may suppress the overall rate level as well as compress the rate structure. As defined for this article, socialization must involve some compression of rate differences among different risk classes and not just the suppression of an insurer's overall rate level.

Hence, constraints on underwriting selection is another way government officials may attempt to override market forces in order to socialize insurance costs.

Because insurers may still be able to exercise some discretion in terms of their quality of service, underwriting stringency and the individuals to whom they market, insurers may be able to lessen the impact of regulatory constraints on their rate structures. For example, if insurers' rate structures are compressed, they may concentrate their marketing on either low or high-risk individuals and adjust their underwriting standards and overall rate levels accordingly. Insurers targeting low-risk individuals will have lower price levels and tighter underwriting standards and avoid insuring high-risk individuals because their rates for high-risk individuals will be inadequate. High-risk insureds will be forced to buy insurance from insurers with higher price levels and more lenient underwriting standards. Hence, market skewing could undermine regulatory constraints on insurers' rate structures. Insurers also could decrease the quality of service provided to high-risk insureds to lessen the impact of price constraints.

Insurers' incentives to circumvent price constraints will depend on their exposure to competition. It is possible that some low-risk insureds will stay with an insurer even though they must pay higher prices to fund cross subsidies. As discussed above, this situation could exist for several reasons. For example, if it is costly for consumers to switch to another company or they value the reputation of their insurer, this inertia may enable the insurer to add the cost of a cross subsidy to the premiums of low-risk insureds without losing their business. This is more likely if the cost of the cross subsidy to low-risk insureds is small relative to the premiums they pay and the transactions costs associated with finding another insurer.

This discussion raises the question of whether insurers would exploit consumer inertia or competitive impediments to earn excess profits if regulators did not attempt to impose cross subsidies.

It can be argued that certain factors would tend to prevent this behavior. First, regulatory monitoring of insurers' overall rate levels and profits would not allow insurers to earn excess profits. Second, even under imperfect competition, insurers would be discouraged from charging excessive prices for low-risk insureds. Some of these insureds may move their business for even a small difference in price which will induce insurers to maintain competitive rates for all risk classes. In general, research indicates that most insurance markets are workably competitive (Cummins and Weiss, 1991; Klein, 1995).

If consumer choice and competition prevent an insurer from transferring the cost of cross subsidies to low-risk insureds, the insurer may be forced to absorb these costs until it is able to exit the market or price constraints are eased. As explained above, there are a number of reasons why an insurer may delay exit and pay such a "tax" for a period of time. However, in the long run, an insurer will ultimately attempt to avoid paying a cross subsidy tax if it is unable to earn a fair rate of return. Thus, the ability of the government to perpetuate cross subsidies in a competitive market should diminish over time.<sup>7</sup>

Residual market mechanisms (RMMs) are another vehicle that is used to implement cross subsidies. These mechanisms provide certain types of property-liability insurance for individuals who cannot obtain coverage in the voluntary market. They tend to be populated by high-risk individuals or individuals for whom insurers cannot charge adequate premiums. In some cases, RMM insureds could obtain insurance in the voluntary market but choose an RMM because it offers them a lower price.<sup>8</sup> The prices of RMMs are typically constrained by regulation and they often run operating deficits that

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<sup>7</sup> This is illustrated by New Jersey's experience where the state has suppressed auto insurance rates for many years. A number of insurers have exited the state and several others have established special New Jersey subsidiaries to insulate their other business from cross subsidies to New Jersey.

<sup>8</sup> This behavior contradicts the purpose of an RMM but some states fail to enforce strict RMM eligibility requirements.

are funded through pro-rata assessments on insurers' voluntary insurance premiums. This is another way of forcing low-risk insureds to fund cross subsidies. Since the assessments are imposed on all insureds, they are not subject to being undermined by competition and market skewing. However, this approach creates other problems which include discouraging insurers from writing voluntary business and low-risk insureds from purchasing insurance. Suppression of RMM prices can encourage moral hazard and cost inflation by failing to charge high-risk insureds an actuarially fair rate.<sup>9</sup>

### *Voluntary Cross Subsidization*

Private or quasi-public organizations may voluntarily attempt to socialize the cost of insurance they provide. Competition will induce profit-maximizing insurers to implement cost-effective risk-based pricing structures. However, certain organizations may pursue goals other than profit maximization, such as enhancing the welfare of all of their members, that prompt them to equalize costs among members. This may be feasible for organizations that provide unique benefits that deter low-risk members from leaving. It also may be feasible for organizations that enjoy special advantages or charters that insulate them from competition from other entities offering similar insurance protection at risk-based prices. Low-risk members will weigh these unique benefits and the costs of switching against the savings or benefits they will gain from moving to another insurance provider. This calculation can change over time and organizations with uniform prices may lose low-risk members as the value of their unique advantages erode in the face of increased competition from alternative insurance providers.

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<sup>9</sup> This phenomenon brought some state workers compensation markets to the brink of collapse in the early 1990s which was averted by regulatory and legislative reforms (Harrington and Danzon, 1996).

### *Imperfections in Risk Classification*

It is important to distinguish attempts to socialize insurance costs from imperfections and discontinuities in insurance risk classification and pricing systems (see Crocker and Snow, 1986). In a world where it is costly to acquire and use information concerning an individual's risk, insurers will limit risk classification factors to variables that are readily measurable and verifiable. There are other risk differences that are not significant enough to justify different risk classifications. For example, in life insurance, it is common to group insureds into ranges or premium "bands" of expected mortality based on their age, sex, medical condition, whether they smoke or not, etc. Life insurers' rates do not vary continuously with an insured's risk based on every factor that affects mortality risk. If a more refined classification system reflects significant differences in risk and is cost effective to implement, insurers will be induced to implement such a system to avoid adverse selection. In competitive, dynamic insurance markets, insurers continue to innovate in refining their risk classification and pricing systems and their fortunes will change depending on the success of their innovations.

### **Assessment Life Insurance**

#### *Early History*

Assessment life insurance offers a good example of voluntary, private associations that sought to provide socialized insurance as one of several benefits from association membership. Assessment life insurance refers to life insurance coverage by which death claim payments are funded by assessments made *after* the deaths of covered persons occur, rather than by premiums *before* claims occur. This form of life insurance was quite popular in the latter part of the 19th Century and the early 20th Century in the United States, and largely followed the model of the English friendly societies. The

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assessment model has roots in the cooperative societies whose membership was recruited from particular ethnic or trade occupational groups. These cooperative associations initially attempted to provide relief to the widows and orphans of their members. Membership dues included an element which was intended to provide funds for relief payments to those widows and orphans. Initially, there were no guarantees about the amount of relief payments to be made.

The traditional reserve life insurance companies that offered guaranteed benefits and guaranteed premiums grew modestly in the first half of the Nineteenth Century, following the founding of the earliest US-based companies. During this period, traditional companies catered to more affluent markets with high cost policy forms, generally of the permanent insurance type.

The first organization to offer assessment life insurance in a more systematic way with a formal contract was the Ancient Order of United Workmen (AOUW), founded October 27, 1868, in Meadville, Pennsylvania. On October 6, 1869, the AOUW adopted an “Insurance Article” which required each member thereafter to pay \$1 into the insurance fund whenever a member died. AOUW leadership created the fund to pay funeral expenses and a death benefit, not to exceed \$2,000, to the deceased member’s heirs.

The Insurance Article turned out to be very successful in attracting large numbers of members to the Organization. It was quickly emulated by other organizations. No doubt this initial success was expedited by the traditional life insurance companies’ failure to compete for the less affluent segment of society. By 1895, there were 614 organizations offering assessment life insurance, representing 52.2% of all life insurance in force, versus 67 traditional life insurers with 47.6% of the life insurance in force.

### *Emergence of Adverse Selection*

Initially, the assessment life insurance feature was intended to be simply a benefit offered as part of a total package of benefits offered to the members of cooperative organizations. It proved to be

so successful, however, that inevitably it attracted the creation of for-profit assessment life insurance associations, which existed for no purpose other than the providing of the life insurance benefit.

The death benefit programs of the early cooperative associations did not guarantee a specific death benefit amount, but competition for membership inevitably led to such a guarantee. Assessment life insurance organizations failed to recognize that the guaranteed death benefits they offered required actuarially sound pricing. Virtually since their inception, the traditional life insurers recognized that need that the single most important element in actuarially sound pricing is the reflection of differences in mortality rates by attained age. Initially, the organizations offering assessment life insurance charged premiums or assessments to their members independent of age. However, these organizations likely assumed that the entire package of benefits offered to members would make membership attractive to their younger members in spite of the cost of subsidizing the death benefit costs for older members.

Since the for-profit assessment life insurance organizations had no other benefits to offer, this made them more susceptible to the anti-selection that would inevitably occur as younger members began to understand the extent of the subsidy. In fact, the for-profit organizations ran into financial difficulty more quickly than the fraternal benefit societies and had pretty well disappeared from the scene early in the 20th century.

However, even the fraternal benefits societies increasingly began to recognize the adverse selection caused by a system that allocated insurance costs without recognition of age. In 1905, one writer observed: “With two such beacon lights as the mortality table and the expectation of life table, there is no excuse whatever for assessment companies allowing themselves to be dashed to pieces on the rocky shores of insolvency, and yet 1,720 have been shipwrecked in eighteen years: who can doubt that many more will share the same fate?” (Stalson, 1969) Whether all these failures can be blamed on the lack of risk-based pricing is questionable. Another researcher concluded that the circumstance most

responsible for failure was smallness of size (Stalson, 1969). Nevertheless, there can be no doubt that pricing was a significant factor.<sup>10</sup>

### *Changing Practices*

As assessment life insurance organizations increasingly became aware of the dangers of age-neutral pricing, they began to take hesitant steps towards the use of attained age in their premium structures. Some organizations adopted a pricing structure in which the assessment was a function of the member's age on commencement of membership. This would have been an appropriate way of assessing insurance costs if the benefit being provided had amounted to a level premium whole insurance life policy. That, of course, was not the nature of the benefit; rather, the benefit amounted to short duration term life insurance.

A number of the assessment organizations attempted to disguise the real reason for the need to increase assessments as the average age of the membership increased, by stating or implying that a benefit was being liberalized. One society, for example, promised a paid-up policy after twenty years, if the members would pay \$1.50 extra for each \$1 of assessment. Another society charged insurance costs that increased with attained age, but promised that premiums or assessments would be level after age 65.

Ultimately, assessment life insurance organizations recognized that if they were to continue to offer essentially what amounted to term insurance, they would have to make assessments that were a function of each member's attained age. Their alternative course would be to change the product to a level premium, permanent life insurance product with full legal reserves, just like the policies offered by

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<sup>10</sup> By 1935, life insurance issued by traditional insurers represented 90.4% of the total in force and assessment life insurance only 5.7%.

traditional life insurers. In fact, this was the choice made by all of the fraternal life insurers that still exist today.

Another factor which accounted for the relative decline in market share of assessment life insurance associations was the reaction of the traditional life insurers to the success of assessment life insurance. Traditional insurers, such as Metropolitan, Prudential, and John Hancock decided that the lower income market was viable and developed industrial life insurance for this market in the latter part of the 19th century. The early years of the 20th century saw the development of group life insurance which was low cost term insurance offered to employers covering their employees, typically at a small fraction of the premiums for individual permanent life insurance.

It is not possible to estimate the economic loss to the members of assessment life insurance associations that failed as a result of the use of non risk-based pricing. If the statistic of 1,720 association failures by 1905, cited earlier, is accurate, the loss had to be enormous. Regardless of the economic loss, assessment life insurance associations became less and less viable as younger members increasingly recognized the degree of subsidy provided to older members and as more risk-based alternatives, such as industrial insurance and group insurance, became available.

## **Community Rating by Blue Cross Organizations**

### *Early History*

In their early years, Blue Cross health insurers made a generally unsuccessful attempt to socialize insurance costs in voluntary health insurance markets through the use of socialized insurance pricing known as “community rating.” Founded in Texas by the Baylor University Hospital, the first significant Blue Cross organization enrolled more than three-quarters of the public school teachers in

Dallas. The Blue Cross style of community-based, hospital pre-payment plans expanded rapidly during the 1930s and continued to grow thereafter.

The formation of the Blue Cross plans before World War II was motivated by a combination of altruism and self-interest by the hospitals. Payment of hospital costs through the Blue Cross mechanism substantially reduced the level of unreimbursed costs that hospitals had to absorb. Their initial success also grew out of the notion that health care should be accessible and affordable to as broad a segment of the population as possible without relying on governmental intervention. Achieving this goal required spreading health care claim costs as broadly as possible throughout the community through a voluntary mechanism without regard to the past experience or current risk characteristics of individuals or groups of individuals. Every subscriber or certificate holder paid the same monthly charge, irrespective of age, sex, family composition, occupation, income, or past claims experience. This pricing structure came to be known as “community rating.”

In their early years and even today, most Blue Cross prepaid hospital expense plans shared the following characteristics:

1. Sponsorship by a hospital or a group of hospitals within a community;
2. Not-for-profit status with certain attendant tax exemptions;
3. Limited choice of benefit options to plan subscribers;
4. Direct writer method of distribution through salaried field personnel;
5. Low level of administrative expense due to size, distribution method, and limited plan choice;  
and
6. Community rating pricing techniques.

The Blues insulation from competition in their early years enabled them to use community rating.

### *Competitors Emerge*

Commercial stock and mutual health insurance carriers began to enter the health insurance field in the 1930s, motivated by the growth in employee benefits that occurred during and shortly after World War II. They began to aggressively compete with the previously dominant Blue Cross organizations. In contrast with “the Blues,” these insurers were motivated by the economic interests of company owners and policyholders, with greater flexibility in benefit design and greater reliance on commissioned agents and brokers to distribute their products.

At first, traditional insurers offered indemnity products that promised reimbursement for incurred hospitalization expenses rather than promising a hospital provided service; these reimbursements were typically subject to copayments and/or deductibles. However, the distinction between service benefits such as hospital stays and indemnity reimbursements became obscured over time. Unlike Blue Cross plans, insurers began using experience rating and risk classification factors in determining premiums or subscription charges. For the larger carriers, the market was not limited to a local community as it was with the Blues, but was regional and perhaps even national in scope. This gave the insurance companies additional pricing flexibility that the Blues, as community-based plans, could not easily justify.

### *Health Insurance Rating*

Experience rating was justified on the notion that subscribers should pay premiums appropriately related to the likely future claim costs and administrative expenses. This implied discrimination in premium charges on the basis of one or more demographic and economic factors. Most health insurance then (and now) was not sold directly to individuals, but to employers, providing coverage for their employees and dependents, with perhaps some cost sharing between the employer

and the employees. Insurers using experience rating techniques thus established premium rates or subscription charges appropriate to the entirety of each insured group rather than individual by individual.<sup>11</sup>

To the extent that premium rates, or subscription charges are established through the claims experience of a group, the experience rating could be of either a retrospective or a prospective nature, or a combination of the two. In the former type of experience rating, the premium charges for prior coverage periods are adjusted after the fact, based at least in part on the actual claims and administrative expenses incurred for the group. Prospective experience rating occurs when future premium charges are set reflecting at least in part the past claims and administrative expenses incurred.

Blue Cross organizations have never employed pure community rating, nor have commercial insurers employed pure experience rating. Both types of health insurers used and continue to use mixtures of rating techniques occurring along a spectrum, with the rating techniques used by the Blue Cross plans in the early years approaching the pure community rating end of the spectrum and the techniques of the commercial carriers coming much closer to pure experience rating.

Even in their early years, the Blue Cross Plans deviated from a pure community rating in that they charged different rates by family composition. Later, they began to distribute their products not just to groups, but also to individuals, particularly retirees from covered groups and those leaving employment with covered groups for other reasons. As this occurred, the Blues plans recognized that these populations would tend to have higher claims costs than individuals actively at work. They thus tended to charge higher subscription charges for such individuals than they charged to at-work certificate holders.

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<sup>11</sup> Perhaps 10% of health insurance was then and is still now sold on an individual basis.

At the same time, commercial carriers from the inception of their entry into the health insurance field, recognized that it was inappropriate to base premium charges either retrospectively or prospectively purely on the basis of each group's historical claims experience. Statistical theory implies that chance occurrences would cause deviations in experience from the expected amount of claims, with the fluctuations around the expected amount increasing in size relative to the expected amount as the size of the group decreases. The commercial insurers typically pooled the experience of groups with fewer than twenty-five or fifty covered employees with no attempt to adjust rates for the experience of an individual group. The rates typically varied on the basis of risk relevant to demographic and economic factors, but not on the basis of an individual group's experience.

In larger groups, the premium rates could be adjusted retrospectively or prospectively with some recognition of past experience. The degree of recognition is based on a so-called "credibility factor." The credibility factor is a weighting of the group's own experience against the assumed experience for the total population of such groups. The theory supporting the use of credibility factors had previously been developed in the workers compensation insurance field and was well understood by insurance actuaries. In addition, experience rating formulas often employ stop-loss features, which in effect, forgive claim charges for an entire group when they exceed a certain level or percentage of a group's total premium. This forgiveness is typically funded through a risk charge against all groups constituting the population, frequently as a percentage of premium. Such stop-loss features are typically incorporated in experience rating formulae for the practical reason that failure to provide forgiveness beyond a certain level of claims would motivate the group to transfer to another carrier where the group could start with a clean slate. Stop-loss features have an actuarial justification in that unusually large losses may not be reflective of the underlying risk or the expected losses of a group.

Arguably, both the credibility factor concept and the stop-loss features represent forms of community rating.

Why did commercial carriers rely more heavily on experience rating than the Blue Cross Organizations? As the commercial carriers attempted to move aggressively into the market, they needed features which differentiated their plans from the Blue Cross plans in a way that appealed to businesses who were their market. Experience rating allowed them to overcome disadvantages such as high-cost distribution methods and the lack of tax exemptions, as well as discounts on hospital services extended to Blue Cross plans by their sponsoring hospitals.

It would be an overstatement to say that the labor unions, without exception, historically supported community rating because of its egalitarian basis and that business leaders uniformly supported experience rating as being entirely consistent with profit maximization. Unions tended to support rating principles which minimize costs for their membership, regardless of whether premium costs are calculated through experience rating or community rating. The Kaiser Foundation Health Plan, sponsored by a business-oriented foundation board, practiced community rating principles. Nevertheless, experience rating generally has appealed to business leaders as likely to minimize business costs, particularly after World War II when health insurance plans tended to move away from an employee-pay-all approach.

### *Changes in Blues Practices*

Heavy reliance on experienced rating by the commercial carriers allowed them to attract an increasing share of those groups with more favorable experience than the community-rated Blues plans. Profit-making employers exercised self-interested selection by choosing insurance priced under a community rating approach or an experience-rated approach, depending upon which approach worked

to their financial advantage. Groups with more favorable experience migrated away from the Blue Cross plans after World War II. As a result, the Blue Cross plans were faced with rapidly deteriorating experience. Inevitably, they were faced with the necessity to adopt experience rating in an effort to retain a reasonable share of experienced-rated plans and lower-risk groups. By 1958, a survey indicated that 55 out of 77 responding Blue Cross plans had embraced experience rating to some degree in response to these competitive pressures (MacIntyre, 1962).<sup>12</sup>

A dominant development since that time has been the rapid growth of cost-plus or administrative services only (ASO) type rating plans often combined with a stop-loss insurance provision, offered by both Blue Cross plans and commercial insurers. For example, so-called non-risk business presently accounts for nearly 50% of the total business of Blue Cross and Blue Shield of Maryland. It is likely that this figure is not much different than the average for other plans.

### *Regulatory Constraints*

Recently, states have sought to intervene and impose community rating of some sort on certain markets, particularly the small group health insurance market, and to a lesser extent, the individual market. It is unclear whether state-imposed community rating will be successful in what remains essentially a voluntary insurance market. If uniform requirements for community rating are imposed on all insurance carriers, competition between carriers on the basis of community rating versus experience rating will be eliminated. On the other hand, employers and individuals considering the purchase of health insurance have alternatives to traditional health insurance, if they believe that community rating works to their disadvantage. One option is not to purchase insurance at all. Another is to take

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<sup>12</sup> According to MacIntyre, the aggressive marketing by the insurance companies was so successful that by 1959, their market share for health insurance premiums reached 50.5 %, surpassing that of the Blue Cross organizations whose community-based plans enrolled a still-impressive 57,000,000 persons nationwide.

advantage of the preemption by the federal government as a result of the Employee Retirement Income Security Act of 1974, (ERISA), which preempts state regulation of self-insured group plans. Self-insured plans frequently limit the plan sponsor's risk by including high deductible stop-loss insurance.<sup>13</sup>

By and large, states that have enacted community rating requirements in the small group market have not established pure community rating. They frequently permit limited deviations from the community rate based on family composition, average age of the group and geographical location. Deviations based on experience are not permitted.

Another recent development which offers individual employees an opportunity to opt out of community-rated plans is the medical savings account (MSA). These plans are available, of course, only to employees whose employers qualify and agree to sponsor such plans. They are being aggressively marketed by certain insurers as an alternative to traditional health insurance plans. Under the MSA, employer and employee contributions would accumulate in a tax-sheltered account that permits withdrawals only for medical purposes; these plans are usually accompanied by catastrophic stop-loss insurance. Any favorable experience is retained by the individual participant. While MSAs have not gathered as much support as expected, MSAs theoretically would be favored by people who expect a lower-than-average incidence of medical claims. Groups or individuals with this characteristic would exit the general group or individual health insurance pool, leading to further adverse selection problems for the remaining insured population.

In summary, the historical evidence supports the notion that pure or near-pure community rating of health insurance cannot persist in the face of alternatives such as experience rating when low-risk groups and individuals have the option of moving to lower-cost insurance arrangements.

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<sup>13</sup> There is current litigation on whether and under what circumstances such plans are subject to state regulation, including state mandated community rating requirements.

Government attempts to change this situation will not be successful unless there are no reasonable or effective ways for lower risk groups or individuals to opt out of the system.

## **Territorial Constraints on Auto Insurance Rates**

### *Socialization of Property-Liability Insurance Costs*

There are a number of instances where state governments have sought to socialize property-liability insurance costs. Typically, this is attempted through legislative or regulatory restrictions on class rate relativities, including territorial or geographic rate differentials in personal auto and homeowners insurance.<sup>14</sup> The restrictions also may be attempted through constraints on insurers' territorial definitions or the variables insurers may consider in establishing rating classifications. Another method is banning or limiting the use of certain underwriting criteria, such as an insured's credit history. Residual market mechanisms are often used to subsidize the cost of insurance for high-risk insureds. Workers' compensation insurance, personal auto and homeowners insurance are the property-liability lines where socialization of costs is most frequently attempted.

### *Michigan's Essential Insurance Act*

One of the most illustrative attempts to socialize property-liability insurance costs is Michigan's effort to limit geographic differences in personal auto and homeowners insurance rates in the 1980s and early 1990s. Consumer advocates often cite Michigan's Essential Insurance Act (EIA) as an example

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<sup>14</sup> Class rate relativities are the mathematical adjustments that insurers apply to their base rates to create different prices for different risk classes. For example, a base rate for personal auto insurance may assume no prior driving violations and an insurer could multiply this base rate by a factor of 1.25 for drivers with 1-2 driving violations.

that other states should follow. However, a careful review of Michigan’s experience reveals the significant problems encountered in attempting to impose binding constraints on territorial rating.

Michigan’s Essential Insurance Act, which became effective in 1981, imposed several restrictions on auto insurance territorial rates, intended to limit prices in urban areas.<sup>15</sup> These included the following principal constraints:

1. An insurer could not have more than 20 differential territorial base rates.
2. An insurer’s lowest territory base rate could not be less than 45 percent of its highest base rate.
3. For adjacent territories, the rate in the lower-rated territory could not be less than 90 percent of the higher rate.

The Act also contained a “take-all-comers” provision that required insurers to accept all “eligible” applicants for insurance, meaning drivers who had not accumulated more than six points for driving violations or who were not convicted of severe driving violations (e.g., reckless driving, driving under the influence of alcohol, etc.), fraud or other serious offenses. Legislators believed this provision would prevent insurers from circumventing the rating restrictions by refusing to accept insurance applicants in high-risk areas. The EIA further prohibited the use of gender or marital status in rating, factors which are commonly used in auto insurance pricing. Ironically, Michigan also moved from a prior approval to file-and-use regulatory system for auto insurance with the enactment of the EIA. This was based on the questionable assumption that the state could constrain territorial rating in a system which relies primarily on market forces to determine prices.<sup>16</sup>

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<sup>15</sup> The Act included a provision under which an insurer could apply to the Insurance Commissioner for relief from the rating constraints if it could show that the constraints were causing it to suffer severe financial impairment. Allstate was the only company of the four major writers that applied for and received permission to vary adjacent territory rates by more than 10 percent.

<sup>16</sup> Michigan Insurance Bureau (1989) and Harrington (1991) provide a more detailed description of the EIA’s provisions.

The reason given for the constraints is reflected in the title of the Act. Automobile insurance was determined to be an “essential” insurance coverage that auto owners were mandated to purchase by law. Hence, it was argued that the state government had a responsibility to ensure that coverage was “available and affordable” to everyone who owned an auto. The fact that Michigan has one of the most stringent auto no-fault laws in the country, strictly limiting accident victims’ ability to sue in tort, also was cited in arguments that the government should take a strong hand in ensuring the availability and affordability of insurance. The EIA was propelled by a Michigan Supreme Court decision in 1978 on the constitutionality of the state’s compulsory no-fault auto insurance law that required legislative and regulatory action to ensure that insurance was available at fair and equitable rates.<sup>17</sup>

Other political factors were influential in achieving legislative support for the EIA. Detroit is the principal city and metropolitan area in Michigan. Among cities, Detroit has suffered severely in terms of economic decline, particularly in its central core. Hence, insurers’ pricing and marketing practices in Detroit, relative to the rest of the state, have been a contentious issue since the 1960s. Like other large cities, Detroit's traffic density and problems with auto-related crimes caused its auto insurance costs and rates to be higher than in suburban and outstate areas. Despite the evidence on risk factors and loss costs, insurers were accused of unfair discrimination against Detroit, which has a significant concentration of minority and low-income residents. This generated additional political support for the EIA, particularly among urban legislators.

The EIA’s rating constraints were temporarily relaxed in 1986 and then reinstated in 1991. Discontent with the effects of the EIA led to the enactment of P.A. 10 in 1986 which suspended the

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<sup>17</sup> 402 Mich 554 267 NW2d (1978).

rating constraints and substituted an alternative approach to limiting rate increases in Detroit.<sup>18</sup> Under the new law, the Detroit premiums collected by an insurer were not allowed to increase by more than four percent plus the change in the Consumer Price Index (CPI) in any 12-month period. Alternatively, an insurer could select an optional cap that limited its Detroit rate increases to the percentage increases it implemented in non-urban areas. Insurers electing this option would continue to be subject to this constraint and could not return to the CPI-indexed cap. Also, to encourage non-urban writers to increase their Detroit business, insurers with Detroit base rates lower than the weighted average of the Detroit base rates of the five largest insurers were allowed to increase their rates to that level before the cap went into effect.

P.A. 10 was scheduled to sunset after 1991, which would effectively reinstate EIA restrictions, unless the legislature chose to extend P.A. 10 or enact alternative legislation. P.A. 10 did sunset, reinstating the EIA restrictions. Finally, in 1996, under a Republican administration and legislature, the EIA's territorial rating restrictions were repealed.

### *Territorial Rating and Marketing*

To assess Michigan's experience, it has helpful to have some understanding of territorial rating in auto insurance. The purpose of territorial rating is to reflect geographic differences in the frequency and severity of auto insurance claims. Geographic differences in risk in auto insurance are well established by analysis of claims experience and factors that affect accidents and claims (ISO and NAI, 1989). Accidents are much more frequent in urban areas where traffic density is much greater and driving conditions tend to be more hazardous. The severity of bodily injury and physical damage claims also may be greater in certain urban areas. The cost of medical and auto repair services, as well as the

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<sup>18</sup> P.A. 10 also contained several provisions to combat auto theft which the MIB perceived to be the primary factor causing

tendency to litigate, are higher in urban areas (Insurance Research Council, 1996). The incidence of vandalism and auto theft, which affects claims under auto comprehensive coverage, also is higher in urban areas.

A study by the Insurance Services Office (ISO) and the National Association of Independent Insurers (NAII) in 1989 shows that Detroit shares these conditions with other major cities. Table 1 compares auto insurance loss costs between Detroit and the remainder of the state for the period 1983-1988. The data indicate that the average loss cost (incurred losses and loss adjustment expenses divided by the number of insured vehicles) is considerably higher in Detroit than the remainder of the state for each of the major auto insurance coverages. Over the 1983-1988 period, the average loss cost in the remainder of the state ranged from 19.2 percent to 66.7 percent of the average loss cost in Detroit, depending on the type of coverage.

Because of the impact of geographic variables, insurers establish a number of automobile insurance rating territories in a state and develop territorial rate factors based on historical experience and the analysis of other information. Typically, insurers divide a major city into several territories and establish separate territories for smaller cities and other parts of a state. Territorial definitions vary somewhat among major insurers, reflecting the interaction of their geographic pricing with other elements of their rating structure, underwriting guidelines and competitive strategies. Consistent with the pattern in other states, insurers divided Detroit and the rest of the state into a number of rating territories.

The geographic structure of the auto insurance market in a typical state also has implications for government attempts to constrain territorial rates. Insurers tend to specialize either in rural, suburban or urban areas, or a particular region of state. Many of these insurers will have policies

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higher losses in Detroit and, hence, was the only legitimate problem with the EIA constraints.

throughout a state, but their business will be more heavily concentrated in areas where they specialize. Similarly, auto insurers distinguish themselves in terms of the stringency of their underwriting standards and target markets (e.g., high risk versus low risk, low income versus high income, etc.). This specialization is encouraged by the information and expertise acquired in focusing on particular markets, which enables insurers to be more efficient and offer more competitive rates for the types and locations of insureds in which they specialize. Insurers' geographic market concentration will be reflected in the location of their distribution outlets and advertising efforts.

### *Effects of the EIA*

How did the EIA affect the auto insurance market and the premiums paid by insureds in various parts of the state? Table 2 provides some information on the significance of the EIA's price constraints relative to the differences in average loss costs between Detroit and low-risk areas. It compares average loss costs between central Detroit and rural western Michigan for the period 1993-1995 for all insurers reporting statistical data to the NAII.<sup>19</sup> From a geographic perspective, central Detroit has the highest loss costs and rural western Michigan (RWM) has the lowest loss costs.<sup>20</sup> Hence, comparing the loss costs for these two areas provides some indication of the extent to which the EIA's constraints bind the rate relativities between the highest and lowest-rated territories for a given insurer.<sup>21</sup>

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<sup>19</sup> Major urban and non-urban insurers in Michigan are included in these data.

<sup>20</sup> These data are divided according to standard statistical reporting territories which vary somewhat from the territories some insurers use for pricing purposes.

<sup>21</sup> These data also are affected by differences in non-geographic risk factors among insureds in various areas of the state. However, these data should provide some indication of the geographic loss cost differences faced by insurers.

The data suggest that the EIA constraints were most binding for comprehensive coverage, where the RWM average loss cost was only 24.5 percent of central Detroit loss costs. The constraints may have been marginally binding for collision and personal injury protection coverage where this percentage was approximately 45 percent. The constraints do not appear to be binding for liability coverage where the relativity was 64.2 percent. Some insurers define their base rates in terms of a package of liability, PIP, collision and comprehensive coverages so the impact of the rating constraints for these insurers is determined by the combined loss costs for these coverages. These loss cost relativities are broad generalizations and the impact of the constraints on a specific insurer for a given policy period may differ somewhat from the general indications of the industry data.<sup>22</sup>

In theory, insurers' geographic orientation and drivers' ability to select among insurers would be expected to undermine EIA's territorial rating constraints. The pricing restrictions could constrain a given insurer's rate structure, but regulators acknowledged that they could not effectively force insurers to actively market insurance in all areas of the state (Michigan Insurance Bureau, 1989). Consequently, the law would be expected to promote greater geographic segmentation of the state's auto insurance market.

Urban insurers that already had a large number of policies in Detroit would be expected to tie their rate structure more closely to their Detroit experience than non-urban insurers. In other words, urban insurers' highest territorial base rate, which was located in the center of Detroit, should come closer to their actual loss costs in Detroit than it would for non-urban insurers. This implies that urban insurers' lowest territorial rate for rural areas of Michigan, in order to comply with the rating

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<sup>22</sup> A more precise approach would be to compare the underlying loss cost indications for territorial bases rates, which would control for other risk related factors affecting the average loss costs and premiums in a given area.

constraints, would tend to exceed the “actuarially-fair” rate for these areas. As a result, fewer auto owners in rural areas would be expected to buy insurance from these carriers.

Instead, a greater number of drivers in low-risk areas would be expected to buy insurance from non-urban insurers who tied their rating structures more closely to the loss experience in these areas. This implies that the Detroit rates of the non-urban insurers would have to be lower than the Detroit rates charged by urban insurers to comply with the rating constraints. This, in turn, should prompt non-urban insurers to decrease their business in Detroit to contain their losses from their inadequate Detroit rates. Hence, the amount of cross subsidies actually achieved among a given company’s insureds, and among all insureds in Michigan, should be diminished by geographic market segmentation.

On the other hand, consumer inertia in switching insurers and insurers’ incentives or inability to shed policies and avoid absorbing losses from inadequate rates in Detroit could support the objectives of the EIA. It is important to point out that while insurers might attempt to avoid writing new business in Detroit at inadequate rates, other EIA provisions would make it difficult for a company to terminate existing policyholders or reject insurance “eligible” applicants in urban areas. As discussed above, the actual effects of a law like the EIA ultimately depend on the structure of the market, the manner in which regulatory constraints are implemented and insurers’ strategic responses.

Unfortunately, the information necessary to thoroughly assess the effects of the EIA is not readily available. However, certain data and regulatory observations have been published that offer some insight into its impact on market conditions. A report issued by the Michigan Insurance Bureau (MIB) in 1989 reviewed market responses to P.A. 10. Examining insurer responses to the temporary relaxation of the EIA constraints provides some perspective on their impact on the market.<sup>23</sup>

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<sup>23</sup> As discussed below, the fact that P.A. 10 was scheduled to sunset in 1991 and might not be extended, had implications for insurers’ actions. Their actions might have been different without the sunset provision and the prospect of reinstating EIA restrictions.

Table 3 summarizes data contained in the MIB report on the base rates and market shares of the two largest urban insurers (Auto Club and Allstate) and the two largest non-urban insurers (State Farm and Citizens) over the years 1985-1988. Both the Auto Club and Allstate had significantly higher market shares in Detroit than statewide, while the opposite was true for State Farm and Citizens. However, Allstate's Detroit market share decreased significantly after 1985, when the EIA's restrictions were relaxed, and came much closer to its statewide market share. The relationship between the Auto Club's Detroit and statewide market shares remained essentially the same over the period. State Farm increased its Detroit market share relative to its statewide market share. On the other hand, Citizens further decreased its Detroit market share while increasing its statewide market share.

Table 3 also provides data on the relationship between these insurers' Detroit rate and their lowest territorial rate. For the Auto Club and Allstate, this relativity decreased from 45 percent (the EIA constraint) in 1985 to 37 percent in 1988. For State Farm, this relativity decreased from 45 percent to 40 percent. For Citizens, the relativity remained relatively fixed at 51 percent. The MIB report observed that the relativities for the first three insurers changed due to increases in their Detroit rates rather than decreases in their outstate rates. The MIB also noted that rate differentials between adjacent territories also increased beyond the 10 percent EIA constraint. Further, insurers increased the number of their territories and territorial rates in Detroit and other cities, utilizing concentric circles to facilitate greater rate differentiation between central and outlying areas. Hence, while the patterns among these four insurers are not uniformly consistent, the data suggest that the EIA and P.A. 10 did have some effect on insurers' prices and geographic concentration given the changes that occurred after the EIA constraints were relaxed.

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It is more difficult to ascertain how much the EIA actually cross subsidized Detroit insureds. The fact that Detroit rates increased and outstate rates remained stable when the EIA constraints were relaxed suggests that Detroit insureds had been subsidized under the EIA. Further evidence is provided by Table 2 which reveals what insureds actually paid, on average, for the various coverages in rural western Michigan and in central Detroit during the period 1993-1995 when EIA rating restrictions were reinstated.<sup>24</sup> The greatest disparities between the loss cost relativities and the average premium relativities occurred for personal injury protection and comprehensive coverage. The RWM average premium for PIP coverage was 77.2 percent of the central Detroit average premium (compared to a 45.5 percent relativity for their average loss costs). This resulted in a 53.1 percent loss ratio in RWM and a 90.2 percent loss ratio in Detroit. For comprehensive coverage, the RWM average premium was 52.2 percent of the central Detroit average premium (compared to a 24.5 percent relativity for their average loss costs). This resulted in a 65 percent loss ratio in RWM and a 138.8 percent loss ratio in Detroit. A similar pattern is revealed for liability and collision coverages but the differences were not as severe.

This analysis offers additional evidence that central Detroit insureds did receive substantial cross subsidies, particularly for PIP and comprehensive coverage, although we cannot precisely ascertain the sources of these subsidies. The relatively low loss ratios in RWM suggest that insureds in outstate areas bore at least a portion of the burden of this cross subsidy. This implies that consumer inertia due to switching costs or other factors enabled insurers to charge higher than actuarially-indicated premiums to RWM insureds.

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<sup>24</sup> Readers should be cautioned that these average premiums were affected by other rating factors in addition to territorial factors. Hence, they do not provide a precise measure of the cross subsidy created by territorial rating constraints.

However, while the data suggest that legislators may have been at least partially successful in cross subsidizing Detroit insureds through the EIA's restrictions, other evidence indicates that they were unsuccessful in their ultimate objective of limiting rate increases and enhancing the availability of coverage in Detroit (MIB, 1989; and Harrington, 1991). The average premium paid in Detroit remained significantly higher than the average premium paid in outstate areas, and continued to escalate over time. In addition, the availability of coverage worsened in Detroit, as an increasing number of drivers, particularly young males, became insured through the state's residual market mechanism. The residual market share increased from 1.8 percent in 1981 to 3.2 percent in 1987 and stayed at that high level until the mid-1990s (see Figure 1). Most of this growth occurred in Detroit; the proportion of residual market facility's policies in central Detroit increased from 8.5 percent in 1985 to 26.8 percent in 1987 (MIB, 1989). The geographic skewing of the market also became apparent to regulators and a source of complaints from insurers.

#### *Assessment of Territorial Rating Restrictions*

P.A. 10 required the Insurance Commissioner to issue a report in 1989 evaluating its effects and making recommendations with respect to regulatory approaches after 1991. The Commissioner's report concluded that Detroit rates had risen in relation to outstate rates and that neither the availability nor the affordability of insurance had improved (MIB, 1989). The report expressed particular concern with the fairness of insurers' rating territories. The MIB also was critical of insurers' marketing efforts and what it perceived to be an inadequate number of agents and distribution outlets in Detroit. It did not recommend a return to the EIA restrictions, but it did recommend that territories should be no smaller than a county or Metropolitan Statistical Area (MSA), whichever is larger. The report also

recommended that all insurers be required to implement a statewide marketing plan with a toll-free telephone number through which applications could be taken and referred to agents.

Yet, the MIB report failed to make a convincing case that insurers' territorial pricing was unfairly discriminatory or adequately explain how insurers could sustain excessive prices in urban areas in the face of competitive market conditions.<sup>25</sup> To support its contentions, the report cites 1987 data which shows that no-fault loss ratios were lower in urban than in non-urban areas. However, these data were only for one year and are not consistent with the patterns indicated in the data for longer time series for 1983-1988 and 1993-1995. The 1987 data also excluded comprehensive coverage where the geographic differences in loss costs and loss ratios are the most severe. Subsequent research further confirms that auto insurance loss ratios tend to be higher in urban areas than in non-urban areas for both liability and physical damage coverages (see Klein, 1997; and Harrington and Niehaus, 1998). Allowing rating territories to be no smaller than MSAs or counties contradicts the variation in geographic risk within these areas and, hence, would be likely to cause market distortions.<sup>26</sup>

Additionally, it should be noted that one of the factors that discouraged outstate insurers from increasing their writings in Detroit under P.A. 10 was uncertainty about whether the EIA restrictions would return with the sunset of P.A. 10. This concern was realized as P.A. 10 did sunset, reinstating the EIA restrictions. This continued the market-skewing and availability problems that had occurred with the EIA's original enactment. Furthermore, insurers' decision to decrease Detroit rates under the less binding constraints of P.A. 10 is consistent with the evidence that Detroit rates were inadequate. If insurers feared a return to more severe restrictions, they would have a strong incentive to increase

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<sup>25</sup> Harrington (1991) discusses the flaws of the EIA and subsequent legislation and their negative effects on the market.

<sup>26</sup> Research by Harrington and Niehaus (1998) confirms that auto insurance loss costs vary significantly within a city or metropolitan area. This has prompted the Insurance Services Office to collect statistical data by Zip code to facilitate the development of more refined rating territories and advisory loss cost indications.

Detroit rates while decreasing their Detroit business to the extent they were able to do so under P.A. 10. And, given that loss costs were increasing statewide, the fact that insurers did not increase outstate rates meant that the effective price for outstate insureds decreased relative to the claims payments they received.

In sum, Michigan's experience with territorial rating restrictions in auto insurance indicates the market distortions that this type of regulation can cause. While Michigan legislators may have been successful in achieving some subsidy of Detroit insureds for a period of time, the problems caused by the EIA's pricing and underwriting restrictions ultimately resulted in their demise. Even with the subsidy, Detroit rates remained high and continued to increase. The EIA and P.A. 10 discouraged insurers from writing more voluntary business in Detroit which significantly decreased the availability of insurance, particularly for high-risk drivers. The reduction of risk and barriers to entry and competition are more viable approaches to improving urban insurance markets than regulatory restrictions on pricing and underwriting (Klein, 1997).

## **Conclusions**

Efforts by both public and private organizations to socialize insurance prices have, by and large, been undermined because the insureds most heavily penalized eventually found ways to avoid subsidizing higher risks. The case studies presented in this article illustrate the natural progression of events leading from a socialized price structure to one that is at least partially risk-based. Unless government precludes any market driven insurance arrangement, the only means by which government can effectively impose socialized premiums without creating severe market distortions is through compulsory participation in a program like Social Security.

This study of failed insurance socialization attempts establishes a historical account from which regulators and legislators can draw. Whether well intentioned or not, legislators must understand that market forces in voluntary insurance markets will lead to some form of risk-based differentiation among insureds. In other words, efforts to provide legislated “rate relief” to certain groups will, sooner or later, fall far short of their goals and have other undesirable effects.

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