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The *McHugh* decision, a landmark ruling in California insurance law, has dramatically reshaped the state's life insurance market. The ruling held that the notice requirements before policy lapses, as mandated by California Insurance Code sections §10113.71 and §10113.72, apply to all life insurance policies in force when these sections became effective, regardless of when the policies were originally issued. As a result, many policy cancellations due to nonpayment of premiums may now be considered incomplete, potentially making insurers liable for death benefits on these lapsed policies. This has triggered a wave of class action lawsuits against life insurance companies.

This paper estimates the potential financial impact of the *McHugh* ruling on California's life insurance industry, using publicly available data and actuarial methods. It draws on the 2018 LIMRA/SOA Individual Life Insurance Lapse Survey, the SOA 2015 VBT Mortality Tables, and the National Association of Insurance Commissioners (NAIC) InfoPro database. By analyzing lapse rates, mortality rates, and policy types, the study projects potential liabilities. The findings suggest that California insurers could face up to $22.4 billion in liabilities, underscoring the urgent need for insurers to implement proactive risk management strategies. Insurers must reassess their product offerings, strengthen financial planning, and ensure they are prepared for the potential surge in claims stemming from this ruling.

For policymakers, the *McHugh* decision highlights the critical importance of clear and precise legislative language. The California Supreme Court's interpretation of the law has set a new precedent, emphasizing the need for legislators and regulators to communicate new rules effectively to avoid unintended consequences. Insights from this analysis should guide policymakers in strengthening regulatory frameworks and improving market oversight to maintain market stability and protect consumers.

The *McHugh* decision's far-reaching implications underscore the necessity for clear communication in legislative changes and the importance of proactive measures to safeguard the insurance industry. With estimated liabilities reaching up to $22.4 billion, insurers, regulators, and policymakers must collaborate to adapt to this evolving legal environment, ensuring the long-term sustainability and stability of California's life insurance market.

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ABSTRACT

The *McHugh* decision, a landmark ruling in California's insurance law, determined that the notice requirements preceding policy lapse were applicable to all policies in effect at the time, not just those written after the law was enacted. As a result, many policy cancellations for nonpayment of premiums can be deemed incomplete, making life insurers potentially liable for death benefits on these lapsed policies. This decision has reshaped the dynamics of the state's life insurance market. This paper examines the implications of *McHugh* on California's life insurance industry by estimating potential costs and liabilities for life insurers. Our findings reveal significant financial costs, with an estimated liability of up to $22.4 billion for life insurers in California. These insights provide valuable guidance for insurers in risk management, product design, and financial planning, and also inform policymakers on regulatory enhancements and market oversight strategies.

Keywords: Life insurance, *McHugh*, lapse

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1. Overview

In the realm of financial security, life insurance stands as a cornerstone, offering individuals and families a safety net against unforeseen circumstances. In 2012, the California State Legislature created certain protections to shield consumers from losing life insurance coverage because of a missed premium payment, requiring "each life insurance policy issued or delivered in this state shall contain a provision for a grace period of not less than 60 days from the premium due date..." and "no individual life insurance policy shall lapse or be terminated for nonpayment of premium unless the insurer, at least 30 days prior to the effective date of the lapse or termination, gives notice to the policy owner and to the person or persons designated..." Codified in California Insurance Code §10113.71 and §10113.72, these protections went into effect on Jan. 1, 2013. However, the interpretation and application of these regulations took a significant turn following the landmark decision of the California Supreme Court in *McHugh v. Protective Life Insurance Company*, 12 Cal. 5th 213, 243, 494 P.3d 24, 43 (2021) (*McHugh*). This decision, handed down on Aug. 30, 2021, unanimously determined that insurance code sections 10113.71 and 10113.72 "apply to all life insurance policies in force when these two sections went into effect, regardless of when the policies were originally issued." Consequently, many policy cancellations for nonpayment of premiums were deemed incomplete.

Based on *McHugh*, several cases have been decided or entered the final stages of settlement (e.g., *Thomas v. State Farm Life Insurance Company*, No. 20-55231, 2021 WL 4596286 [9th Cir. Oct. 6, 2021] and *Bentley v. United Omaha Life Insurance Co.*, No. 2:15-cv-07870 [C.D. Cal.]). Many cases are pending against life insurers in California and federal courts based on alleged violations of Sections 10113.71 and 10113.72, and new cases are being filed regularly.

McHugh has far-reaching implications for the life insurance landscape in California, leading to a cascade of legal challenges and unsettling the equilibrium of the industry. This paper highlights the implications of *McHugh* and estimates how much it could cost life insurers if the decision is not overturned on appeal or addressed with legislation. The decision is effective for all policies in California that were purchased before Jan. 1, 2013, and lapsed for nonpayment on or after Jan. 1, 2013. To file a claim, the insured must pay any unpaid premium. Any nonforfeiture benefits paid would be subtracted from death benefits. Using publicly available data and information, we estimate that the *McHugh* decision could cost life insurers in California up to $22.4 billion.

This outcome highlights the importance of clear language and communication when drafting and implementing new legislation or regulations. Given the Court's surprising interpretation of the law and the new precedent set, regulators, legislators, and insurance companies should redouble efforts to be clear and concise when writing and communicating new rules.

This paper proceeds as follows. Section 2 provides background information and briefly reviews relevant literature. Section 3 describes the data and information we used, and the analytical approach of our estimate. Section 4 provides and discusses the results. Section 5 concludes the paper.

2. Background and Prior Literature

The life insurance sector plays a vital role in the economies of all 50 states and the District of Columbia. Investments by life insurers bolster state economies, as individuals and their families attain financial stability through various life insurance products. California boasts the largest life insurance market among all states. In 2022, purchases of life insurance coverage (face amount) in California amounted to $350 billion, with the total life insurance in force reaching $4.6 trillion, and total direct premium receipts at $21 billion (American Council of Life Insurers [ACLI], 2023). In 2022, life insurance coverage (face amount) purchases in the U.S. totaled approximately $3.3 trillion, with the total life insurance in force reaching $38.5 trillion (ACLI, 2023). The U.S. population in 2022 was 333.3 million, with California's population at 39.03 million, according to the United States Census Bureau. This translates to per capita life insurance coverage (face amount) purchases of $9,958 in the U.S. and $8,961 in California, and per capita total life insurance in force of $65,425 in the U.S. and $117,354 in California.

Policy lapses are frequent occurrences in life insurance markets. These policies offer policyholders the option to terminate them before their expiration or payout of a death benefit. A policy lapses when its premium remains unpaid, whether voluntarily or involuntarily, by the end of a specified period (often referred to as the grace period). Following this, the policyholder ceases to make future premium payments, and no death benefit is reimbursed to the policyholder.

During the initial stages of a life insurance policy, premium payments surpass the actuarially fair value of the risk insured. Conversely, in the later stages, premium payments fall below this value. Consequently, policyholders who lapse after maintaining the policy for a sufficient period give up value, which the life insurance company retains as profit.[1] These profits, known as lapsation profits, are accounted for in the pricing of life insurance policies from the outset due to market competition (Gilbert & Schultz, 1994; Gottlieb & Smetters, 2021).

On the other hand, writing a life insurance policy entails significant upfront fixed costs. Insurers absorb agent commissions, policy issuance charges, and administrative costs, which may take years to recoup. As a result, insurers may incur losses on policies if consumers lapse early into the contract, even if no death benefit is paid out.

Therefore, lapsing significantly influences life insurance pricing, and the anticipation of lapsing is integrated into the pricing framework of life insurance policies. This impact has been extensively explored and analyzed (Albizzati & Geman, 1994; Bacinello, 2003; Bauer et al., 2006; Carson et al., 2020), along with investigations into the underlying causes of lapsing (Outreville, 1990; Kuo et al., 2003; Fier & Liebenberg, 2013; Cole & Fier, 2021; Fang & Kung, 2021).[2]

Lapse rates in life insurance are substantial. From 2009 to 2013, the overall annual policy lapse rate averaged 4% annually, or 5.3% annually on a face-amount basis (Shaughnessy & Tewksbury, 2019). From 1991 to 2010, life insurers issued $29.7 trillion in new individual life insurance coverage in the United States, while $24 trillion of coverage lapsed within the same time frame (Carson et al., 2020).

1. This is different from the cash value, or "surrender value," paid out when a whole life policy lapses.

2. For a more comprehensive review on lapse in life insurance, refer to Eling and Kochanski (2013).

In *McHugh*, the California Supreme Court determined that recent amendments to the California Insurance Code, which introduced notice requirements preceding policy lapse, were applicable to all policies in effect at the time, rather than solely to new policies issued after the passage of those amendments. *McHugh* paved the way for numerous class action lawsuits against life insurance companies, posing a significant liability threat to the life insurance industry. For those who passed away after years of not paying premiums, claims could be made retroactively (after death) by paying premiums for the losses (deaths) that had occurred.

3. Data and Analysis

3.1. Data and Assumptions

We drew upon publicly available data and employed robust actuarial methodologies to estimate *McHugh*'s potential impact on the life insurance industry in California. We collected lapse rates and exposure by policy year, age, and type of insurance from the 2018 LIMRA/Society of Actuaries (SOA) Individual Life Insurance Lapse Survey. Mortality rates were from the SOA 2015 Valuation Basic Tables (VBT) Mortality Tables. We collected state-specific data for the number of policies and face values in California from the National Association of Insurance Commissioners (NAIC) InfoPro database.[3]

We developed a comprehensive model to assess the effects of *McHugh* on the life insurance industry in California. This model relies on the following three assumptions.

1. Insurance product distribution, lapse rates, and mortality rates in California are equivalent to those of the U.S.
2. Universal life insurance has no cash value and performs similarly to annual renewable term insurance.[4]
3. The cash value paid out when a whole life policy lapses for nonpayment is equal to one-half of the policy reserve (Tsai et al., 2002).

The first assumption allows us to use the mentioned data, which is only publicly available at the U.S. national level. The second and third assumptions enable us to conduct the analysis without requiring detailed information on individual insurance policies.

3.2. The Model

We modified and repurposed a series of standard actuarial calculations to estimate the effects of *McHugh*. We needed to estimate the number of policies in force on Jan. 1, 2013, that lapsed before the *McHugh* decision and the number of lapsed policyholders who subsequently died. Lapsation and mortality depend on policyholder's age, gender, and policy year (the number of years since policy was underwritten).

Denote $q_{g,x,\tau}$ as the probability of death for an insured with gender g, age x, and policy year τ. Likewise, let $l_{g,x,\tau}$ be the probability that a policy lapses for nonpayment.

3. Data are used with permission. The NAIC does not endorse findings gleaned from these data.

4. Universal life insurance can build up cash value if policyholders choose to pay more than the minimum premium, hence this assumption might lead to an overestimation.

First, we estimated the amount of premium required to bring lapsed policies current. The formula differs by type of insurance and ignores expense and profit loads.

For annually renewable term (ART) policies, the premium is determined each year between the lapse year and the death year -1 and is the present value of expected death benefits in each year as a percentage of the average policy face value, *F*. We assumed an interest rate, *r*, equal to 5%

$$Prem_{ART} = \frac{q_{g,x+k,\tau+k}}{1+r}. \quad (1)$$

where k = 0 for the year when a policy lapses. Equation 1 shows that for each dollar of the average policy face value, the premium for ART policies is equal to the probability of death benefits being paid for an insured, discounted by the interest rate, and calculated annually.

For the 20-year term and whole life policies, we calculated a level annual premium for the duration of the policy, T . The duration of a whole life policy could be as high as 119[5] minus the age at issue, x[1]. In practice, however, there is not a meaningful number of policies for insureds older than 95.[6] Premiums for whole life and term life are determined at issue, so the starting policy age used is equal to 1 (1+k-1 = k for the policy year in q). Let K represent how many years the policy is going to last when it is calculated (min[95, 119 - age] for whole life and min[20, 119 - age] for term life). Premiums are set to be the same for all the years and are calculated so that the sum of the present values of expected annual premium payments (taking into account that the insured might die and stop paying the premium) equals the sum of the present values of expected death benefits for the duration of the contract. Thus, the premium for level-term and whole life policies is calculated using Equation 2

$$Prem = \frac{\sum_{k=1}^{K}\left[\frac{s_k \cdot q_{g,x^1+k-1,k}}{(1+r)^k}\right]}{\sum_{k=1}^{K}\left[\frac{s_k}{(1+r)^{(k-1)}}\right]}. \quad (2)$$

where S_k is the cumulative survival probability at policy year τ+k-1.

The survival probability is calculated at the time a policy lapses for annual renewable term, or at the time a policy is issued for level-premium term and whole life. The initial survival probability is always equal to 1 (the insured is alive at the time of calculation). The age used in the calculation is the age when the annual premium is calculated. For an annual renewable term, it is the insured's age when the policy lapses. For level term and whole life, it is the age when the policy is issued. The cumulative survival probability S_k, is calculated as shown in Equation 3.

5. Typically, a whole life policy will remain in force until it expires at its "maturity date," which is usually when the insured reaches age 100 or 120.

6. People aged 95 and older make up 0.19% of the U.S. population, while males aged 95 and older represent only 0.1% of the total U.S. male population. Additionally, 70% of policyholders are male.

$$S_k = \begin{cases} 1, & \text{if } k = 1, \\ \prod_{k=2}^{K} (1 - q_{g,x+k-1,\tau+k-1}), & \text{otherwise.} \end{cases} \quad (3)$$

As shown in equation 3, S_k represents the probability an insured remains alive for each year, taking into account the probability that they have survived in previous years.

Next, we estimated the amount of cash value that was distributed to whole life policyholders when policies lapsed. Whole life insurance policyholder pays a constant premium, leading to overpayments in the early years and underpayments in the later years (because mortality risk is lower at younger ages than at older ages). These early overpayments contribute to the policy reserve, *Res*. This reserve, minus any fees and expenses, is paid out to the policyholder at the time of policy lapse. Assumption 3 states that the cash value was equal to one-half of the policy reserve. The reserve is calculated using Equation 4

$$Res = \sum_{k=1}^{K^d} \left[\frac{s_k \cdot q_{g,x+k-1,\tau+k-1}}{(1+r)^k} \right] - Prem \times \sum_{k=1}^{K^d} \left[\frac{s_k}{(1+r)^{(k-1)}} \right]. \quad (4)$$

where K^d represents the number of years the policy lasts before the insured's death year.

For whole life policies, insurers could potentially owe the face value net of premium due (between lapse year and death year - 1) and the cash value paid out for each lapsed policy for which the insured subsequently died. For the term life policies, there is no cash value paid. For ART policies, there is no cash value paid, and the premium is determined each year between the lapse year and the year before the insured dies (death year - 1). Whole life and level term life premiums are determined when the policy is issued. This affects which age and policy year enters the equation. Let $year_{death}$ and $year_{lapse}$ represent the number of years between 2013 and each event. Now the amounts insurers could potentially owe, *B*, for each type of policy are shown in Equations 5–7.

For whole life:

$$B_w = 1 - Prem \times \frac{(1+r)^{(year_{death} - year_{lapse})} - 1}{\frac{r}{1+r}} - 0.5 \times Res. \quad (5)$$

For term life:

$$B_t = 1 - Prem \times \frac{(1+r)^{(year_{death} - year_{lapse})} - 1}{\frac{r}{1+r}}. \quad (6)$$

For ART:

$$B_a = 1 - \sum_{k=year_{lapse}}^{year_{death}-1} Prem_{ART} \times (1+r)^{year_{death}-k}. \quad (7)$$

Equations 5–7 represent the amount the insurers owe for each dollar of the respective average face amounts of the three types of policies if the policy lapses and the insured dies. Once we take into account the probability of policy lapses and the mortality rate given the gender, age, and policy year, we can calculate the expected amount insurers owe as:

$$E(Pay_{type}) = \sum_{j=0}^{J} \left[prob_{inforce} \times l_{g,x+j,\tau+j} \times \sum_{k=j}^{K} (B_{type} \times prob_{nodeath} \times q_{g,x+k,\tau+k}) \right]. \quad (8)$$

where J = min(term - policy year, years) represents how many years a policy can be in force between 2013 and 2021, K = min(term - policy year, years) represents how many years a policy can be in force after it lapses between 2013 and 2021, and $prob_{nodeath}$ is the probability of not dying after the policy lapses. Equation 8 shows that the expected amount insurers owe takes into account the probabilities of policy lapse and insured deaths between 2013 and 2021, as well as the policy types.

By definition, the insured is alive in the year before the policy lapses, and $prob_{nodeath}$ is equal to 1 at the time, hence

$$prob_{nodeath} = \begin{cases} 1, & if\ k = j, \\ \prod_{k=j+1}^{K} (1-q_{g,x+k,+k}), & otherwise; \end{cases} \quad (9)$$

and $prob_{inforce}$ is the probability that a policy is in force. The policy must be in force before 2013, which means the initial probability used in 2013 is equal to 1, hence

$$prob_{inforce} = \begin{cases} 1, & if\ j = 0, \\ \prod_{j=1}^{J} (1-l_{g,x+j,\tau+j}) * (1-q_{g,x+j,\tau+j}), & otherwise; \end{cases} \quad (10)$$

Next, we applied the gender breakdown by total face value from the LIMRA/SOA survey (70% of the policyholders are male, and 30% are female) and multiplied Equation 8 by the distribution matrix to get the unpaid net benefit for each type of insurance and gender. We then summed across types and genders to get the result for each year. To get cumulative results, we summed across years. The cumulative unpaid net benefit was calculated from Equation 11.

$$\begin{aligned} Cum\_B_{year} \\ = 0.7 * \sum^{type} [Frac_{type} \times Face_{type} \times \textstyle\sum_{0}^{year} \sum_{x=1}^{X} \sum_{\tau=1}^{T} P_{x,\tau,type} \times E(Pay_{type}) | male] + 0.3 \\ * \sum^{type} [Frac_{type} \times Face_{type} \times \textstyle\sum_{0}^{year} \sum_{x=1}^{X} \sum_{\tau=1}^{T} P_{x,\tau,type} \times E(Pay_{type}) | female]. \end{aligned} \quad (11)$$

where $Frac_{type}$ and $Face_{type}$ represent the fractions of the three types of policies relative to all policies, and the average face values for each policy type, respectively.[7]

Finally, California specifies that prejudgment interest must be applied at 10% per year as simple interest.[8] We calculated the amount of annual interest charged on unpaid benefits under the *McHugh* decision by multiplying Equation 11 by 10%. We then summed the annual interest across years to get the cumulative interest.

4. Results

Our analysis yields compelling insights into the potential ramifications of the *McHugh* decision on the life insurance industry in California. Results appear in Table 1. Using data on the number of policies in California and the lapse rates and exposure matrix, we estimate that 2,636,991 individual life insurance policies lapsed in California between Jan. 1, 2013, and Aug. 30, 2021. Of these lapses, our model predicts that approximately 121,956 insured individuals had passed away.

Furthermore, we project substantial financial liability for life insurers in California. Our model (equations 1–11) estimates that the 121,956 policies that lapsed between 2013 and 2021, where the insured subsequently died, could create a $19.2 billion liability for life insurers in California. This liability is partially offset by $2.8 billion in premiums required to bring the lapsed policies current and cash value benefits that would be subtracted from the face values before the payment of death benefits.[9] Therefore, the estimate for the cumulative net benefit potentially owed by life insurers in California is $16.4 billion from 2013 to 2021. If insurers are required to pay prejudgment interest on unpaid net benefits, the total will be $22.4 billion (assuming a 10% simple annual interest rate, as per California law). Table 1 presents the estimates for the cumulative unpaid net benefits and interest potentially owed by life insurers in California.

Table 1: Cumulative Unpaid Net Benefit and Interest

Year	*j*	Cumulative Net Benefit	Annual Simple Interest	Cumulative Interest
2013	1	$ 300,039,608	$ 30,003,961	$ 30,003,961
2014	2	941,178,081	94,117,808	124,121,769
2015	3	1,955,480,827	195,548,083	319,669,852
2016	4	3,371,246,637	337,124,664	656,794,515
2017	5	5,224,636,992	522,463,699	1,179,258,215
2018	6	7,561,799,854	756,179,985	1,935,438,200
2019	7	10,419,992,585	1,041,999,259	2,977,437,458
2020	8	13,792,761,330	1,379,276,133	4,356,713,591
2021	9	16,399,802,881	1,639,980,288	5,996,693,879
Total = 16,399,802,881 + 5,996,693,879 = $22,396,496,760				

Notes: The results for 2021 are multiplied by two-thirds to account for the partial year through Aug. 30. The total is the sum of the cumulative net benefit and the cumulative interest.

7. $Frac_{type}$ and $Face_{type}$ come from data for the number of policies and face values in California from the NAIC InfoPro database.

8. MC-013-INFO, Information Sheet for Calculating Interest and Amount Owed on a Judgement. https://www.courts.ca.gov/documents/mc013info.pdf

9. Details on these two estimates are available from the authors upon request.

These findings underscore the significant financial burden imposed on insurers by the *McHugh* decision, with far-reaching implications for the stability and viability of the life insurance market in California. As stakeholders grapple with the fallout of this landmark ruling, prudent measures must be taken to navigate the complex legal and financial landscape and safeguard the interests of insurers, policyholders, and regulatory authorities alike.

5. Conclusions

In summary, the *McHugh* decision stands as a pivotal milestone that has significantly influenced the landscape of insurance law and policy, leaving a profound impact on California's life insurance market. The decision determined that the notice requirements preceding policy lapses applied to all policies in effect at the time. Consequently, many policy cancellations for nonpayment of premiums can be deemed incomplete, which may leave life insurers liable for death benefits on these lapsed policies. This has led to numerous class action lawsuits against life insurance companies. Our analysis sheds light on the substantial financial liabilities looming over insurers in the wake of this landmark ruling, underscoring the urgent need for proactive measures to mitigate risks and ensure the long-term sustainability of the industry.

Our findings offer actionable insights for both life insurers and policymakers. For insurers, understanding the financial liabilities associated with lapses affected by *McHugh* facilitates effective risk management strategies, enabling them to assess and mitigate their exposure to risk, tailor product offerings, and make informed financial projections to maintain stability. Meanwhile, policymakers can use this information to strengthen regulatory frameworks and enhance market oversight to identify and address emerging risks.

Although *McHugh* could have solvency and market implications, the California Department of Insurance appears to correctly acknowledge that this falls outside its purview as a state insurance regulator. They filed an informational amicus brief[10] in the case, and they issued Bulletin 2021-8 (Lara, 2021) instructing insurers to interpret the California Insurance Code in compliance with *McHugh*.

While the immediate focus may be on the implications for insurers and policyholders in California, the broader implications of such decisions reverberate throughout the insurance industry, warranting careful consideration and scholarly analysis.

Our primary takeaway for insurance regulators and lawmakers is to emphasize clarity and communication when drafting and implementing new laws. Regardless of the California legislature's intent to change the rules on existing policies in 2012, if they had written the law clearly or explained it clearly to insurance companies, they could have avoided a potential unexpected loss of up to $22.4 billion. With this example in mind, regulators and legislators can do a better job going forward.

10. *McHugh v. Protective Life Insurance*, No. S259215 (Cal. Mar. 24, 2021) (brief of Amicus Curiae). Retrieved from https://www.courts.ca.gov/documents/18-s259215-ac-ricardo-lara-032421.pdf

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