



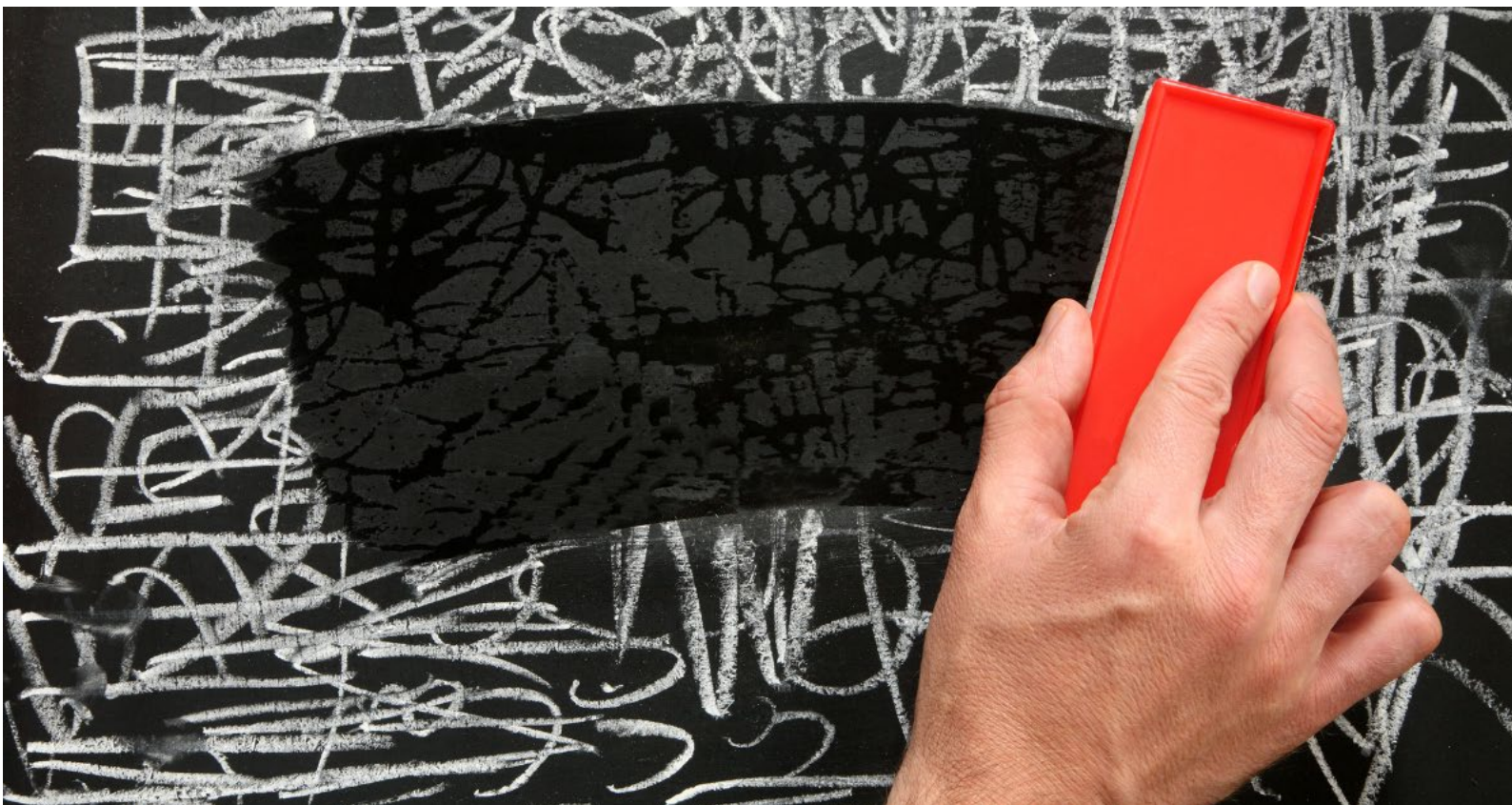
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# The Implications of the “Right to be Forgotten for Cancer Survivors”

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## 1. Introduction

### 1.1 Current Status in the EU

Six EU countries have already introduced regulatory frameworks on the topic of the "Right to be Forgotten for Cancer Survivors" (RTBF). Based on the EU's "Beating Cancer Plan", it is expected that other countries will soon adopt similar legislation. The main motivation is the observation of "financial exclusion", since people with certain pre-existing conditions are no longer able to obtain life insurance (or only at greatly increased premiums), and thus the provision of collaterals in the context of loan financing for a property or a business is severely restricted. Some authors call this exclusion discrimination.

One problem with the current debate is that no reliable information has been collected to estimate the true extent of financial exclusion and the areas of insurance where it is significant. In addition, a precise definition is needed to collect such data. "Exclusion" may result from a policyholder's willingness to pay less than the market premium (particularly because of her degree of risk aversion). But it is also possible that exclusion occurs because the policyholder cannot pay the market premium because her assets are too low (i.e., her willingness to pay is sufficient, but her ability to pay is not). Or: the supply side does not serve certain groups of people because they have already anticipated the situation mentioned above.

This figure, taken from a publication by Gen Re (2022, ed.)<sup>1</sup>, gives an overview of the current regulations in six EU countries, including a first draft by the Italian government.

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<sup>1</sup> Vgl. hierzu Gen Re (2022, ed.): Remember to forget – insuring cancer survivors and the right to be forgotten, written by Weber, A. / Schmidt, N. / Wunsch, H. / Schilling, A. (<https://www.genre.com/content/dam/generalreinsuranceprogram/documents/uwfocus22-2-weber-en.pdf>).

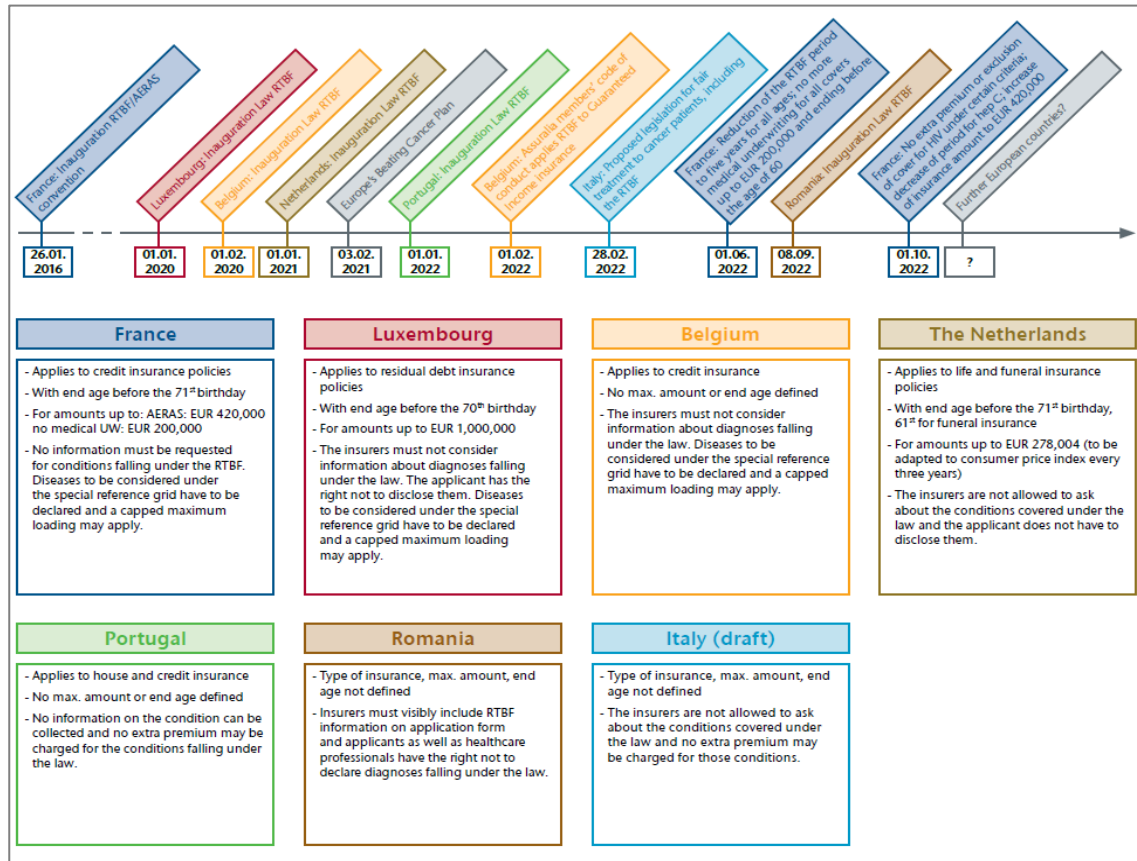


Figure 1: Differences in types of insurance, sums insured and declarations in different EU countries. Source: Gen Re (2022, ed.)

Not only do the areas of application in the various countries vary considerably in terms of the types of insurance and periods considered, but in some cases non-tumor diseases have also been included in the regulation (see Gen Re (2022, ed.)).

## 1.2 First Implications

### Generating Adverse Selection

- ❑ Adverse selection results from information asymmetry in favor of one or more contracting parties. In this case, the policyholders are better informed than the insurer due to the RTBF. The insurer cannot differentiate fully between the individual risks. The resulting average premium, which applies equally to "high"



and "low" risks, attracts high-risk individuals. Low-risk individuals are no longer insured (or are insured to a lesser extent). This creates a new insurance pool, which leads to an increase in the average premium. Complete adverse selection is also called a "market failure" because the subsequent allocation of resources is worse than it would be in the absence of information asymmetry.<sup>2</sup> This results in a "welfare loss" for society. In the present case, a potential market failure can be described in analogy to G. Akerlof as follows: In the extreme case, there is only demand for insurance from people with pre-existing conditions. This group of people then receives conditions that they would have received even with a full risk classification applied. The reason for this is that people without pre-existing conditions are no longer available for cross-subsidization because they do not demand coverage under these conditions.

#### *What is a Cancer Survivor?*

- ❑ In our opinion, the term "cancer survivor" can only be meaningfully defined in statistical terms. It should be a figure showing that the probability of dying from the previous cancer does not differ significantly<sup>3</sup> from that of people without this specific previous disease. This would have to be controlled for via key influencing factors like age, gender, region of residence, lifestyle factors, etc. Since this is not easily possible due to the complexity of cancer (e.g., subtypes and stages), an objectification can only be carried out using standardized criteria, which are imprecise.
- ❑ To define binding terms with legal certainty, an "end of treatment" must be defined. Is it the completion of surgery, adjuvant chemotherapy, or the cessation of medication to control or prevent recurrence of the originally diagnosed disease?

#### *Cancer Survivor Only?*

- ❑ In our opinion, for reasons of fairness and equal treatment, the RTBF cannot be limited to preexisting cancers, but must apply to all severe diseases.

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<sup>2</sup> Cf. Akerlof, G. (1970): The Market of «Lemons»: Quality Uncertainty and Market Mechanism, Quarterly Journal of Economics (42), pp. 488-500.

<sup>3</sup> Hence, a statistical interval limit needs to be defined.



Otherwise, it will discriminate against people who have survived other serious illnesses within the defined period without recurrence. Should the whole process develop in this direction (e.g., due to complaints from the affected), the problem of adverse selection in the insurance market will be further aggravated.

#### *Additional Transactions Costs Will Raise the Premium in any Case*

- The level of detail of the regulations presented in the study by Gen Re (2022, ed.) is accompanied by enormous transaction costs. N. Doherty / J. Garven (1986)<sup>4</sup> already show that in a competitive insurance market all transaction costs (i.e. regulatory costs, taxes, additional operating costs for the insurer, etc.) must be borne exclusively by the policyholders. This means that the premium is increased by the present value of the additional transaction costs. Customers should also be transparently informed about this effect to determine whether they have sufficient willingness to pay for the RTBF when it is implemented in insurance practice.

### 1.3 *Social Legitimacy of the RTBF*

As with the introduction of unisex pricing in the EU at the end of 2012, the question is whether there is a broad social consensus to justify the implementation of a RTBF. In our view, this is crucial, as such a regulation will have a direct impact on the prices that policyholders pay in the market. Therefore, at the beginning of the regulatory process, there should be empirical evidence that the RTBF is an issue that is supported by the majority and that there is a general willingness and ability to cross-subsidize. In our view, there are serious doubts about this. In the literature we reviewed, we could find only one survey in Ireland that purported to illustrate the social desire for such regulation.<sup>5</sup>

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<sup>4</sup> Cf. Doherty, N. / Garven, J. (1986): Price regulation in property-liability insurance: A contingent-claims approach, *The Journal of Finance* (41), pp. 1031-1050.

<sup>5</sup> Cf. Irish Cancer Society (2022, ed.): *The Right to be forgotten beyond cancer: Access to financial products and services*, p. 2 (<https://www.cancer.ie/sites/default/files/2022-02/Access%20to%20Financial%20products%20report%202022.pdf>)



Policyholders' willingness and ability to pay cannot be determined simply by answering yes or no to (biased) questions. Rather, a real purchase situation would have to be simulated with concrete product prices. The necessary incentive-compatible methods have long been established in marketing. In addition, instead of a direct survey of willingness to pay, a relative analysis should be carried out, e.g., via a choice-based conjoint assessment. Due to the importance of the regulation in question, such an analysis must be representative for the EU and provide statistically significant results - in summary and for the major sub-samples (e.g., for groups with and without previous illnesses).<sup>6</sup>

Against this background, it is not surprising that statements such as a "*cancer diagnosis should not mean having an additional premium on insurance costs or be a barrier to getting credit*" were supported by a majority of respondents. However, since the RTBF leads to cross-subsidization, it would be important to analyze to what extent individuals without pre-existing conditions are willing to accept an increase in premiums in a real purchase situation and to bear additional transaction costs caused by this regulation. It should be noted that the transaction costs associated with the RTBF must be borne by all policyholders - with and without pre-existing conditions. This aspect should also be adequately considered in such a customer survey.

In summary, it seems unacceptable to us to initiate regulatory processes that claim to serve the interests of policyholders without examining what their interests actually are.

## ***2. The Influence of Previous Diseases on Life Expectancy***

People with cancer generally have a significantly lower (long-term) life expectancy under otherwise identical conditions. For products where life expectancy and/or cost of illness are the basis for calculation, risk classification, taking into account age, lifestyle factors and possible pre-existing conditions, is of central importance.

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<sup>6</sup> Information on the statistical significance of the results cannot be found in the study. Furthermore, only 97 people were interviewed who are or have been affected by cancer.



The disease-free period, during which the probability of death approaches that of people with no history of disease, varies widely for different cancers. For example, the probability of recurrence is generally lower for breast cancer than for many other malignancies. However, in breast cancer in particular, the original disease can recur even after many disease-free years. The probability of a recurrence, even after a long disease-free period, is therefore higher than the incidence of the disease in people who have never been confronted with this diagnosis (under otherwise identical conditions).

This will be illustrated by means of an example calculation.

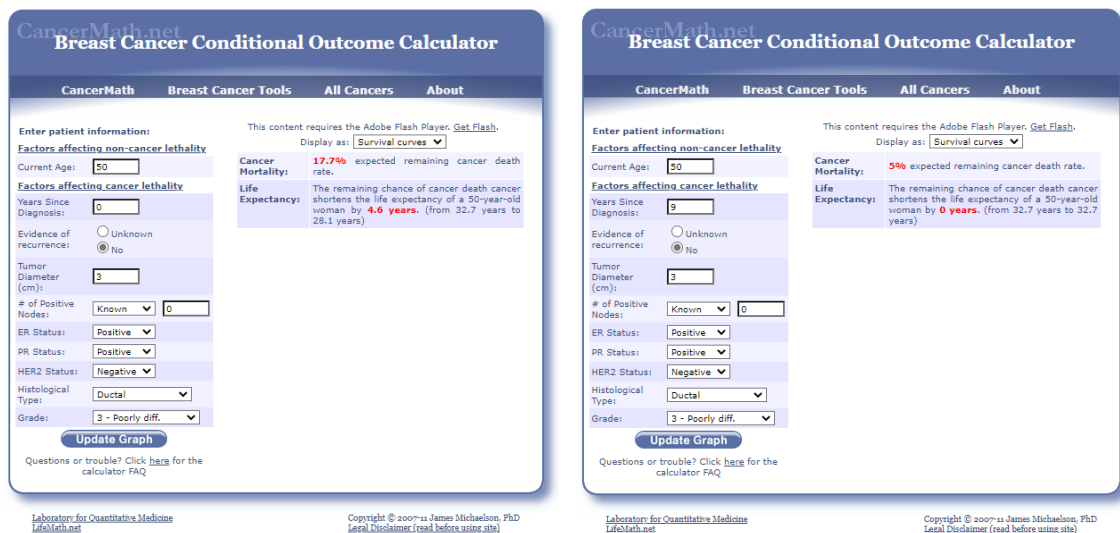


Figure 2: Estimation of the conditional expected mortality in the case of breast cancer. The expected value is calculated taking into account the number of disease-free years after completion of the therapy - hence "conditional" - (3 a) left: 0 disease-free years; 3 b) right: 9 disease-free years). Source: www.lifemath.net/cancer

For the case considered, the probability of dying from breast cancer is 17.7% after completion of therapy and 5.0% after nine disease-free years for the case considered.<sup>7</sup>

A comparison of the calculation tool www.lifemath.net/cancer with other publicly available models, such as www.breast.predict.nhs.uk/tool, reveals significant dis-

<sup>7</sup> It should be noted that the probability of death from this disease is also positive in people who have not previously had the disease.



crepancies that cannot be explained solely by differences in data sources and time periods. A major influence is the assessment of the extent to which medical progress will occur in the future. This can be illustrated by the example chosen. Based on the empirical data, the probabilities shown in Figure 2 result, with more recent data receiving a stronger weighting than older data. An assessment of the most advanced treatment options yields the picture shown in Figure 3.

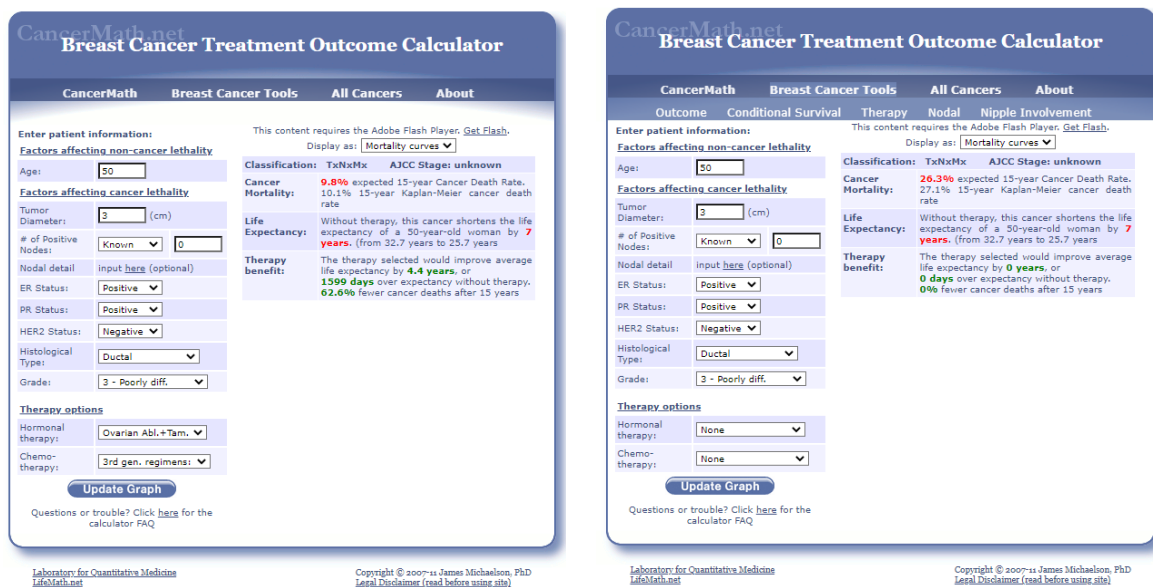


Figure 3: Estimation of expected mortality over 15 years for the case of breast cancer. 4 a) left: Surgery followed by hormone and chemotherapy according to the latest standard 4 b) Right: Left: Surgery without further therapy. Source: www.lifemath.net/cancer

The mortality probability of 9.5% calculated here refers to the period of 15 years but is certainly lower than the value of 17.7% calculated in Figure 2 a), even if the entire remaining life is considered. However, as Figure 3 b) shows, the calculation in 2 a) is already based on further therapy (in addition to surgery), which was common in the past. This can be seen in comparison with Figure 3 b), which is based on an estimate with surgery but without further therapy. 2 b) provides a higher mortality probability than 2 b), although in 3 b) the observation period is limited to 15 years.





We believe this is important because in the current debate, the insurance industry is being accused of failing to take adequate account of medical advances in the context of risk classification and premium calculation. For example, Scocca / Meunier (2020) state:<sup>8</sup>

*«Bankers and insurers have difficulties assessing the risks associated with such a complex disease and its risk of relapse. Adopting a precautionary approach in the interest of their business, insurers often applied a principle of caution and denied cancer survivors' applications in order to maintain their solvency. As the progress of cancer treatments are rapidly improving the prognosis of many patients, up to date information is still often lacking and risk assessments are made on outdated data or models».*

Basically, this remains an assertion, as no evidence is provided. More important, however, are the example calculations, which show that the consideration of advances in medical therapy (case 3 a)), in contrast to a purely empirical measurement (cases 2 a) / b) and 3 b)), depends strongly on the assumptions made about the future trend function. The assumption that there is only one scientifically accepted procedure at this point in time, which is ignored by the insurers, is not in line with the facts.

It should be noted that the data used in the calculation tool come from the USA (period 1987-2007). The issue is complicated by the fact that the survival rates of people with (but also without) pre-existing conditions vary considerably across EU countries. As an example, Insurance Europe<sup>9</sup> states:

*“Treatment options and availability tend to differ between member states. As the European Commission concedes: ...When it comes to accessing high-quality cancer care, and particularly for timely diagnosis and treatment, patients are still faced with substantial differences in the standards of care, leading to unacceptable disparities across the EU. For instance, survival rates following treatment for breast cancer vary by 20% between countries and the five-year survival for colon cancer ranges from 49% to 68%.”*

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<sup>8</sup> Cf. Scocca, G. / Meunier, F. (2020): A right to be forgotten for cancer survivors: A legal development expected to reflect the medical progress in the fight against cancer, *Journal of Cancer Policy* (25), p. 2.

<sup>9</sup> Insurance Europe (2021): The EC beating cancer plan — reflections on the right to be forgotten, *Position Paper*, S. 4.



This illustrates that the time limits applied in the EU in the context of RTBF, which have been shortened for certain cancers (ostensibly on the basis of evidence), are inconsistent, as there are also diseases that would require longer time limits without recurrence. The case presented in this chapter is an important example, as it is a common form of cancer.

For more details, see the study by (Gen Re 2022, ed.), which calculated the relative mortality of cancer patients according to age and disease-free period based on the SEER database (period: year 2000 to 2018). The relative mortality is higher than that of the total population, even for long periods (such as 18 years).

### ***3. What Should a Proper Solution Look Like?***

#### *Preliminary Remark*

It seems particularly problematic that the forced pooling of heterogeneous risks via the RTBF follows neither the principle of private insurance (via risk-based pricing) nor the concept of social insurance. The latter claims to achieve a cross-subsidization from the wealthy to the less wealthy. This is precisely not the situation in the present case, since, e.g., less wealthy people who do not have a history of cancer now have to cross-subsidize wealthy policyholders with a history of cancer.

#### *A Simple Solution to the Problem*

For the above reasons, intervention in the market mechanism of the private insurance sector is strongly discouraged, as it will lead to (actuarial) discrimination of individuals. This "exclusion" can become even greater than the existing one.

If "financial inclusion" in the status quo case is indeed a broad social concern, individuals who cannot afford the market prices for insurance due to certain pre-existing conditions should be directly supported by public funds (i.e., a premium subsidy should be provided).<sup>10</sup>

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<sup>10</sup> Such an approach has been successfully practiced for many years in the Swiss health insurance market for the compulsory coverage.



The direct subsidy described is considered in the literature to be the right way to solve the problem in question. For example, Rothschild (2011) formulates:<sup>11</sup>

*“... categorical pricing bans are inefficient even when categorization is costly. Whenever the ban-imposing government can instead provide breakeven partial social insurance, it can remove its ban in such a way that the insurance market will choose to employ the categorizing technology only when doing so is Pareto improving.”*

Dionne / Rothschild (2014)<sup>12</sup> summarize their findings as follows:

*“We have analysed the consequences of restrictions on risk classification in a broad range of canonical insurance market models. Such restrictions have potentially desirable distributional consequences; indeed, that is a major motivation for imposing such restrictions. We argued that such restrictions typically also have negative efficiency consequences in market-based settings that are otherwise unregulated. These negative efficiency consequences mean that, in principle, there is some method for achieving the distributional benefits of such restrictions at a lower cost without imposing such restrictions. In so far as it is possible in practice to obtain these distributional benefits in lower-cost ways—as in the settings discussed in the section “Welfare analysis with distributional and efficiency effects”—these negative efficiency consequences argue strongly against restricting the use of risk-classification in otherwise market-based settings. There are, of course, alternative interpretations of this result: one can interpret it as an explicit “pro-market” argument against bans on risk classification, or, alternatively as a “pro-interventionist” argument for the implementation of alternatives or complements to bans on risk classification.”*

The direct subsidy is the best solution for the following reasons:

- Only those customers who cannot afford the market premium due to a pre-existing cancer are supported. The subsidy funds (taxes) are collected to a greater extent from economic entities with high incomes or profits.

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<sup>11</sup> Rothschild, C. (2011): The Efficiency of Categorical Discrimination in Insurance Markets, *Journal of Risk and Insurance* (78), p. 267.

<sup>12</sup> Dionne, G. / Rothschild, C. (2014): Economic Effects of Risk Classification Bans, *The Geneva Risk and Insurance Review* (39), p. 217.



- ❑ It avoids adverse selection and thus the economic disadvantages of underinsurance.
- ❑ The transaction costs of implementation, which in the context of RTBF must be borne by policyholders and force an increase in premiums, are significantly lower.
- ❑ In this respect, "financial exclusion" can be avoided much more efficiently if it is a social objective. Why this clear and simple path, which is recommended in the literature, is not taken by the responsible politicians, is beyond our knowledge.

#### 4. A Model for Estimating the Impact of Adverse Selection and Financial Exclusion

##### *Basic Approach*

In the following, we present a general model for estimating the market effects of the RTBF. We believe this approach is useful because a calculation for a specific product category from a particular submarket is easily open to the charge of having little general validity. It is true that specific assumptions about pricing and the demand function of policyholders are needed in our model. However, these assumptions are arbitrarily adjustable. In essence, the chosen parameterization usually determines only the extent of adverse selection and the degree of exclusion.

Figure 4 below shows four classes that the insurer can differentiate between. The variance of the indemnity payment  $X_i$  per risk is the same for all risk classes  $i = 1, 2, 3, 4$ , but the expected indemnity payment per class increases.<sup>13</sup> Thus,  $E(X_1) < E(X_2) < E(X_3) < E(X_4)$  holds. The expected payouts are the same for each policyholder in a class. That is, each class describes a homogeneous collective.

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<sup>13</sup> Higher central moments of the distribution of the indemnity payments are not considered.



	t = -z	t = 0
Class 1	LR	LR
Class 2	HR	LR
Class 3	LR	HR
Class 4	HR	HR

Figure 4: Schematic representation of four risk c

In Figure 4, t = 0 denotes the current point in time and t = -z the declaration period that restricts the insured's access to information or permission to use health data when the RTBF is implemented.<sup>14</sup> LR (HR) stands for "Low risk" ("High risk") and refers to a policyholder for whom, all other things being equal, no previous cancer has been detected for the period under consideration up to -z or between -z and 0.

The implementation of the RTBF means that classes 1 + 2 and 3 + 4 are aggregated into one class each, since the insurer no longer receives the information before t = -z. The risks in the remaining two classes are then generally heterogeneous and force a mixed calculation.

We assume that all policyholders j (= 1,...,k) are risk-averse (with risk-aversion coefficient a > 0) and have a μ-/σ-preference. Formally, the utility φ of policyholder j from her wealth W<sub>1j</sub> in t = 1 is as follows:

$$[1] \quad \varphi(W_{1j}) = E(W_{1j}) - a \cdot \sigma(W_{1j})^2$$

Without loss of generality, we assume that the insurance company calculates an insurance premium per risk according to the following formula:

$$[2] \quad \pi_i = E(X_i) (1 + \lambda)$$

In general, λ > 0 since the insurer must cover operating costs and the cost of bearing the risk. The more risk-averse the policyholder (increase in parameter a), the higher the percentage premium λ surcharges she is willing to accept. Equation [1] thus represents a demand function, while equation [2] represents a supply function.

<sup>14</sup> In countries that have implemented the RTBF, time limits of between 5 and 10 years usually apply.



The policyholder can now take out full insurance coverage or no insurance. For the income in  $t = 1$ , the following applies for policyholder  $j$ :

$$[3] \quad W_{1j} = W_{0j} - \pi_i \quad (\text{case with full insurance coverage})$$

$$[4] \quad W_{1j} = W_{0j} - X_i \quad (\text{case without insurance})$$

There are two forms of "financial exclusion" that we will consider together:

A) The policyholder cannot afford the insurance premium because her initial wealth  $W_0$  is too small relative to the insurance premium  $\pi_i$ . We assume that such exclusion occurs when  $\pi_i > 0.1 W_0$ . Thus, an insurance costing more than 10% of available wealth will not be purchased.

B) The utility without insurance is higher than the utility with insurance.

A policyholder therefore only takes out insurance if there is a utility increase.

Similarly, we measure the financial exclusion and examine whether there are more or fewer exclusions due to the transition from 4 to 2 collectives.

In all cases, we assume that the insurer will only offer insurance coverage if the sum of all premium loadings  $E(X_i) \cdot \lambda$  in the two-class case is not less than in the four-class case. It is not guaranteed, that such a situation is achievable. This means that there may also be outcomes that do not lead to insurance supply - unless the insurance industry would be willing to offer contracts that do not cover costs.

### *Numerical Example Case 1*

First, we define a group size for the calculation (which can of course be adjusted in our calculation tool). It is obvious to assume that class 1 is more crowded and that the number of policyholders in each class decreases. Class 4 is therefore the least populated. As a starting point, we assume Class 4: 200, Class 3: 200; Class 2: 200, Class 1: 10,000.



The income distribution in society was adjusted for Switzerland using the data from Statista 2023.<sup>15</sup> Within an income class, our model assumes an equal distribution. We create 100 discrete income classes.

The percentage premium surcharge  $\lambda$  and the degree of risk aversion  $a$  are the same in each class and for all policyholders assuming  $\lambda = 35\%$  and  $a = 0.1$ .

For an indemnity payment  $X_i$  in class 1, the following values apply:  $E(X_i) = 100$  und  $\sigma(X_i) = 50$ . The classes differ by a factor of 2 (for class 2), 5 (for class 3) and 15 (for class 4) respectively. For example, for class 2, this means that the expected payout, and therefore the premium, is twice as high in class 2 as it is in class 1.

- ❑ There are more exclusions in relation to the size of the groups, because the policyholders in the more populous class 1 are no longer (fully) willing to accept the higher premiums. There are 100 additional exclusions in this class:

Exclusion (abs.)	4 classes	2 classes	Difference	No. in the portfolio	Percentage
Class 1	800	900	100	10,000	94,34%
Class 2	36	18	-18	200	1,89%
Class 3	146	152	6	200	1,89%
Class 4	200	152	-48	200	1,89%
<b>Sum</b>	<b>1182</b>	<b>1222</b>	<b>40</b>	<b>10,600</b>	<b>100.00%</b>

- ❑ The following applies to the price increase / price reduction:

	Type	Factor Exp. Value	Premium 4 classes	Premium 2 classes	Increase
Class 1	LL	1	135.00	141.91	5.1%
Class 2	HL	2	270.00	141.91	-47.4%
Class 3	LH	5	675.00	709.55	5.1%
Class 4	HH	15	2,025.00	709.55	-65.0%

- ❑ A good 96% of insured thus pay a higher premium.

<sup>15</sup> Cf: Statista 2023: Verteilung der Monatsnettolöhne in der Schweiz 2020.



- ❑ The premium surcharge of originally 35% (4-class case) increases to 41.9% (2-class case)

### Numerical Example Case 2

In the following example, we change the class size and the premium surcharge:  
Class size: 1: 10'000; 2: 1'000; 3: 500; 4: 100; Premium surcharge  $\lambda = 30\%$  (for the original 4 class case)

- ❑ In relation to the respective group sizes, there are more exclusions overall, as the policyholders in the highly populated class 1 no longer fully accept the increased premium.

Exclusion (abs.)	4 classes	2 classes	Difference	No. in the portfolio	Percentage
Class 1	800	900	100	10,000	86,21%
Class 2	170	90	-80	1,000	8,62%
Class 3	350	385	35	500	4,31%
Class 4	100	77	-23	100	0,86%
<b>Sum</b>	<b>1420</b>	<b>1452</b>	<b>32</b>	<b>11,600</b>	<b>100.00%</b>

- ❑ The following applies to the price increase / price reduction:

	Type	Factor Exp. Value	Premium 4 classes	Premium 2 classes	Increase
Class 1	LL	1	130.00	143.21	10.2%
Class 2	HL	2	260.00	143.21	-44.9%
Class 3	LH	5	650.00	716.03	10.2%
Class 4	HH	15	1,950.00	716.03	-63.3%

- ❑ Hence, almost 90% of insured persons thus pay a higher premium.
- ❑ The premium loading of originally 30% (4-class case) increases to 43.2% (2-class case).

In the overall view, it can thus be said:





- ❑ Whether there are more exclusions depends on whether the number of people in classes 1 and 3 who are no longer insured is overcompensated by more policyholders in cross-subsidized classes 2 and 4.
- ❑ In principle, most policyholders pay more than before, since the risks that have to pay for the wealth transfer are in the majority.
- ❑ In addition, the problem may arise that the insurer can no longer raise the total loading ( $E(X_i) \cdot \lambda$ ) that it generated under 4 classes in the two-class case. This can lead to a reduction in the supply of insurance and thus to further disadvantages for policyholders.
- ❑ In our example, we have assumed that the insurer knows the extent of adverse selection that will result from the RTBF. In reality, this is not the case. Insurers will have to compensate for this uncertainty by raising premiums in order not to expose themselves to the risk of substantial losses. Thus, in practice, clients will have to expect a premium surcharge due to this source of uncertainty alone.
- ❑ Our calculations do not include the regulatory costs of the RTBF. These alone will lead to a premium increase.

## 5. Summary in Bullet Points

- ❑ Six EU countries have already introduced a regulatory framework for RTBF. The main motivation is the observation of "financial exclusion", since people with certain pre-existing conditions are hardly able to take out term life insurance, and thus the provision of collateral in the context of credit financing is severely limited.
- ❑ The RTBF raises numerous questions of definition (time limits, definitions of illness and survivors, etc.). The practical implementation is costly for clients. For this reason alone, this regulation will lead to premium increases.
- ❑ People with a history of cancer generally have a significantly lower long-term life expectancy, all other things being equal. Estimating the probability



distribution of a policyholder's biometrics is the central basis for risk-based premium pricing, especially in life insurance. A regulation in the sense of the RTBF therefore forces a cross-subsidization of the personal insurance sector through the generation of heterogeneous collectives.

- ❑ As with the introduction of unisex pricing in the EU, the question arises as to whether there is a broad social consensus that justifies the implementation of the RTBF. This presupposes that "low-risk" individuals have sufficient willingness to pay for cross-subsidization towards "high-risk" individuals. There are no reliable studies on this. We believe that it is unacceptable to implement regulations that claim to serve the interests of policyholders without studying their needs.
- ❑ It remains doubtful whether the RTBF can be limited to individual insurance and financial products, especially in the long term. If regulation is applied to the entire private personal insurance sector (including private health insurance), the effects of adverse selection are massive.
- ❑ For reasons of fairness and equal treatment, the RTBF can hardly be limited to precancerous conditions, but will have to refer to other conditions as well. Otherwise, one would be discriminating against people who have survived other serious illnesses within the specified time period without recurrence. Should the whole process develop in this direction (e.g. due to complaints from affected persons), the problem of adverse selection in the insurance market will be further aggravated.
- ❑ Based on a model calculation for realistic scenarios, it can be shown that the adverse selection created by the RTB can lead to more exclusion than in the existing situation. This is because some groups of people without pre-existing conditions will no longer be able to afford insurance due to higher prices.
- ❑ We find it particularly problematic that the forced pooling of heterogeneous risks via the RTBF follows neither the principle of private insurance nor the concept of social insurance. The purpose of social insurance is to achieve cross-subsidization from wealthy to less wealthy groups of people. This is not the



case here, since less wealthy people without pre-existing conditions have to cross-subsidize wealthy policyholders with pre-existing conditions.

- ❑ If the RTBF is implemented, there is a risk that technology companies, which regularly engage in regulatory arbitrage and thereby ignore local frameworks (e.g., data protection or tax laws), will displace the insurance industry. Such a development would not be welcome from the perspective of policyholders. The state assuming risks previously borne by the private sector is also associated with many disadvantages for insurance customers and taxpayers.
- ❑ If financial inclusion is a broad social concern, people whose income and assets do not allow them to afford market prices for insurance coverage of certain pre-existing conditions should be directly supported by taxpayers' money. This is the only way to ensure that there is a need for the supported group of people. It is acceptable in the concept of the RTBF that, among other things, there is a cross-subsidization of wealthy groups with pre-existing conditions by groups of people who do not have pre-existing conditions and can hardly afford the existing market premium.

## 6. Outlook

- ❑ The EU initiative on RTBF assumes the exclusion of parts of the population but does not quantify its extent. In addition, the definition of financial exclusion is unclear.
- ❑ Regulatory approaches pretend to act in the interest of the customer. There is a complete lack of serious assessment of policyholders' preferences and willingness to pay. The survey cited to support the RTBF position are unprofessional and do not follow any scientific standard. The procedure seems to be guided by a target image and is therefore not open.
- ❑ The alleged exclusion of a minority is countered by discrimination against the majority. Calculations already show that prices will increase significantly (up to 10%) for most individuals. Considering the size of the EU insurance market and the fact that this is only a limited individual measure for the time being (i.e., deadlines for RTBF only for certain illnesses and insurance savings), the



impact on customers is massive. Far more people than before will be denied access to affordable insurance.

- ❑ The insurance industry, unlike its policyholders, is not significantly affected by a RTBF regulation that is limited to one line of business (term life) and certain illnesses. However, it will be forced to charge higher premiums to most policyholders.
- ❑ The insurance model, which is central to value creation in all industrialized countries, will run into massive problems if the logic of RTBF regulation is extended to all insurance products and disease patterns - even if this is because customers are demanding equal treatment, which has become unbalanced because of RTBF. The same applies if re-regulation leads to a fundamental questioning of the risk classification factors. For example, a ban on the use of age as a differentiating factor could be demanded on similar grounds as the RTBF. This would be tantamount to a de facto abolition of life insurance.

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