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**NATIONAL FUND FOR
MEDICAL ATTENTION
FOR TRAFFIC
ACCIDENTS: CONTEXT,
ANALYSIS AND
FINANCIAL BALANCE**

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This article reflects the particular considerations of the author. In no sense is it a document that identifies the policy guidelines carried out by the Ministry of Finance

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PREAMBLE

Social security, in general terms, guarantees coverage against events related to health, old age and work accidents. Specifically, the health subsystem covers four areas: 1) health promotion, 2) disease prevention and treatment, 3) patient rehabilitation, and 4) pregnancy and childbirth. However, work accidents and traffic accidents are excluded. The first is covered by the labor risk component within the Law. The second, although an accident fund is established, insurance for traffic accidents falls on agents outside of social security. The latter poses significant social and financial challenges. On the social side, the traffic accident, depending on the complexity, can leave economic consequences of reduced family income. On the financial side, it results in extraordinary expenses, from which the household does not take any provision.

Traffic accidents, therefore, cannot be minimized. In fact, the World Health Organization (WHO) reveals that traffic accidents are the leading cause of preventable death among the population between 15 and 29 years of age. The same organization indicates that 80% of deaths derived from these accidents, in the American continent, mainly affect passengers and pedestrians. Furthermore, out of every 100 accident deaths, 90 are in low- and middle-income countries.¹ For the country, the WHO estimated 3,052 deaths from traffic accidents for 2013. However, the Metropolitan Transportation Authority (AMET) revealed 1,946 deaths for the same period. Although the discrepancy is not minor, it is evident that accidents on public roads are a national problem. Even the Ministry of Economy, Planning and Development (MEPyD) quantified the expenses and consequences of traffic accidents at about US\$700 million or 1.3% of GDP on

average².

For reasons stated, different governments launched compulsory traffic accident insurance (SOAT). This seeks, among other aspects, to have a rapid health response and even financial compensation to victims of these events. In addition, a fund is attached to this insurance, which acts as a second-tier insurer by type of medical expense. From the point of view of Social Security, the country does not have a SOAT, but it does have a National Accident Fund (FONAMAT). However, the latter, due to its nature and coverage objective, is not enough. This article, meanwhile, focuses on the FONAMAT. This is so, because almost ten years after the first resolution on it, the fund does not establish actuarially optimal rates. Furthermore, the National Social Security Council must deal with two complex situations. The first is the pressure from citizens seeking quality medical services in the face of these accidents. And the second is the pressure from health risk insurers (ARS) that seek increases to the capita for these claims.

Indeed, the article seeks to analyze the fund through its interrelation and financing. The document is divided into six parts. The first introduces The second reviews the fund's historical background. The third analyzes FONAMAT schemes in Latin American countries. The fourth examines the national fund. The fifth explores the effective and potential performance of the fund through an ARS. And the sixth concludes.

BACKGROUND OF THE FONAMAT

An understanding of support instruments in traffic accidents, such as FONAMAT, deserves a brief historical review of vehicle insurance. The rise of these is linked to the expansion of the automotive industry at the

1 See about Global Status Report about Road Safety 2015, World Health Organization

2 Access the website: <http://www.elcaribe.com.do/2014/08/09/gasta-13-pib-accidentes>

beginning of the last century. According to Donati (1978), the end of the First World War stimulated the mass development of motor vehicles. This, in turn, increased the number of traffic accidents. Faced with this situation, insurance companies accelerated the creation of financial products whose purpose was to mitigate the cost of property and health losses. With this objective, the first products in the industry are designed, based on four key aspects: 1) priority of the victim, 2) guarantee against damages, 3) solidarity fund for vehicle victims and 4) civil liability insurance³.

However, in its beginnings, the insurance was mainly civil liability. Clarification is important, since currently the literature shows, on the one hand, personal accident insurance and, on the other, civil liability to deal with traffic accidents. One of the main differences between the two mechanisms lies in the process of demonstrating guilt. In this sense, the adoption of regulations linked to compulsory vehicle insurance begins in Europe. The first countries to regulate such insurance were: Finland (1925), Norway (1926), United States (1927), Australia and New Zealand (1928), United Kingdom (1930) and Germany (1939). After the Second World War, through the Benelux Convention (1955), the insurance obligation was adopted in other countries such as Luxembourg, Belgium and the Netherlands. France, Greece, Spain and Portugal are also added. Even countries in other regions incorporated similar regulations. Such is the case of Japan (1955), the Philippines (1974) and China (2007)⁴.

In Latin America, until the year 2000, six countries had compulsory insurance. These are Brazil (1969), Colombia (1986), Chile (1986), Costa Rica (1976), Ecuador (1996), and Bolivia (1998). In general terms, the insurance seeks a collective solution to claims produced on public roads. The coverage includes medical,

hospital and transportation expenses, as well as compensation for disability or death and reimbursement of funeral expenses. In addition, the covered risk is limited to a limit and the financing resources are different by country. Likewise, several countries have developed compensation funds that seek, on the one hand, to cushion the insurance fund and, on the other hand, to protect victims of unidentified or uninsured automobiles. Next, FONAMAT is compared with similar funds in Latin America.

INTERNATIONAL EXPERIENCE SOLIDARITY AND GUARANTEES FUND (FOSYGA) -COLOMBIA

According to the regulations, the FOSYGA is an account attached to the Ministry of Health and Social Protection by fiduciary order that manages four sub-accounts. These are: 1) internal compensation of the contributory regime, 2) solidarity of the health subsidy regime, 3) health promotion and 4) catastrophic risk and traffic accident insurance (ECAT). In the specific case of ECAT, the objective is to guarantee comprehensive care for victims with physical or mental damage. According to the Federation of Colombian Insurers, ECAT is a “second floor” insurer that covers two types of cases. First, attention to victims of unidentified or uninsured vehicles. And, second, those insured whose cost of care is higher than the cost of initial medical care.

The ECAT presents different sources of financing. The first consists of a percentage (20%) between the difference in the value of issued premiums and the amount of compensation authorized by the Ministry of Health and Social Protection. The second corresponds to 3% of the annual premiums collected for the national road prevention fund. The third is the contribution equivalent

³ See Donati, A. in Personal and Security Insurance, Gaviria (2011)

⁴ See Gaviria (2011), Compulsory Traffic Accident Insurance. Federation of Insurers of Colombia.

to 50% of the value of the annual premium established by the SOAT charged additionally. The fourth includes the returns on the fund's regular investments.

On the coverage side, ECAT covers four main areas to a cap (Table 1)⁵. The hedging mechanism is executed in tranches. For example, if the victim requires medical attention that exceeds the SOAT coverage (500 smldv), the second section in charge of FOSYGA is activated up to a limit (300 smldv). If it is still not enough, the hospital charges the difference to the health promotion entity (EPS) or professional risk insurer (ARP).⁶

COMPENSATION FUND (FISO) SOAT -BOLIVIA

The fund operates on a compulsory basis financed by the insurance companies that operate the SOAT. Its basic purpose is the coverage of claims caused by unidentified vehicles. However, it covers all casualties in the event and includes medical, clinical and death costs. The fund is supervised by the Superintendency of Pensions, Securities and Insurance (SPVS).

During the 15 years of operation, the FISO has a total of 8,380 beneficiaries and an annual average of 560 cases (Graph 1). Along the same lines, total paid claims amount to US\$6.8 million with an average per year of US\$460 thousand. Furthermore, of every US\$100 paid for claims, US\$70 is dispersed to medical expenses, while the remaining US\$30 is paid for death. Expenses for permanent disability are practically non-existent. In 2015, the cases handled by the FISO were concentrated in the capital of the Republic⁷.

SOAT COMPENSATION FUND - PERÚ

The purpose of the fund is to support victims of traffic accidents caused by unidentified vehicles. Through it, the coverage of medical expenses and burial expenses is paid. However, said coverage will be established by both the SOAT and the CAT (traffic accident certification issued by AFOCAT⁸). The fund is administered by a public-private committee belonging to the Ministry of Transport and Communications.

According to the regulations, the fund is financed via five items. The first corresponds to contributions made by insurers prior agreement. The second is the amount of benefits not collected by SOAT or CAT. The third is the fines imposed by the competent authority for violations. The fourth and fifth are transfers from the central government and domestic and foreign donations.

The benefits are calculated based on a Tax Unit (UIT). Coverage for death will be 4 UIT, while permanent disability and temporary disability are covered up to 4 UIT and 1 UIT per victim, respectively. On the other hand, medical expenses reach up to 5 UIT and burial expenses up to 1 UIT.

During the 2004-2016 period, 79% of income came from two main sources: 1) insurance companies and 2) agreements and municipalities (Graph 2). On the expenditure side, medical and burial expenses reach 92%. Total claims during the same period reached 8,240, of which 6,324 correspond to medical expenses and the remaining 1,916 to burial expenses. For the former, the average expense is US\$975.65, while for the latter it is close to US\$1,050.

⁵ See ECAT Subaccount <http://www.fosyga.gov.co/>

⁶ In the Dominican case, the EPS is equivalent to the Health Risk Administrator (ARS) and the ARP is the Occupational Risk Administrator.

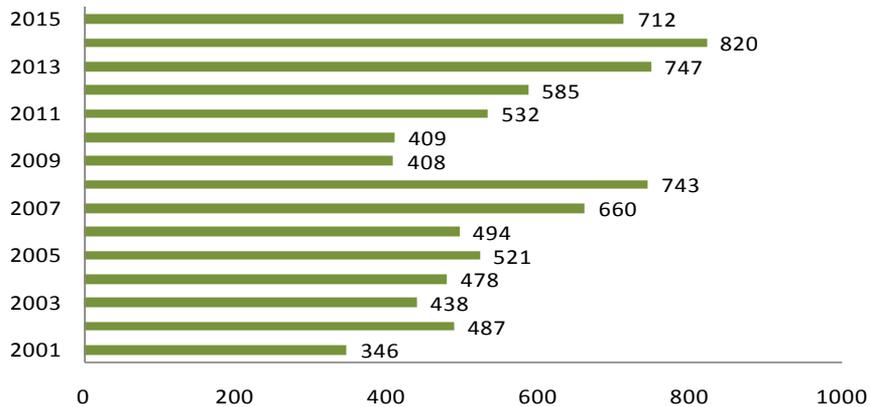
⁷ See SOAT Statistical Bulletin January-December 2015. <https://www.aps.gob.bo>

⁸ AFOCAT: Association of Regional or Provincial Funds against Traffic Accidents.

Benefits	Current Legal Minimum Daily Wages
Expenditure on transportation and mobilization of victims	10 SMLDV
Permanent disability compensation	180 SMLDV
Compensation for death and funeral expenses	750 SMLDV
Surgical Medical Services	800 SMLDV

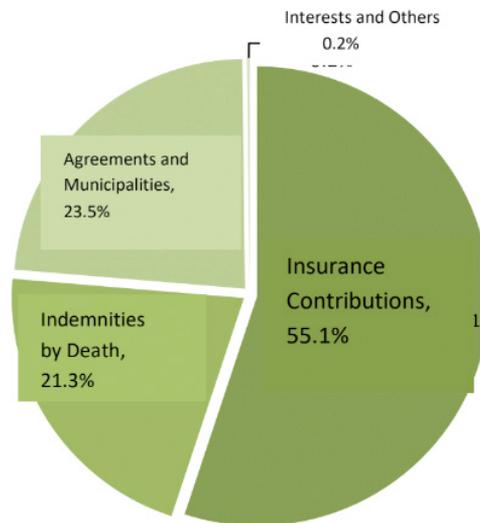
Table 1. ECAT Benefits Coverage

Source: Solidarity and Guarantee Fund. Ministry of Health and Social Protection -Colombia



Graph 1. FISO Beneficiaries

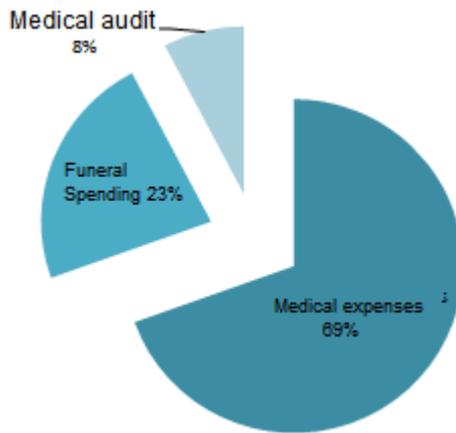
Source: Comprehensive Services FISO



Graph 2. Compensation Fund Income Composition (2004-2016*)

Source: Ministry of Transport and Communications

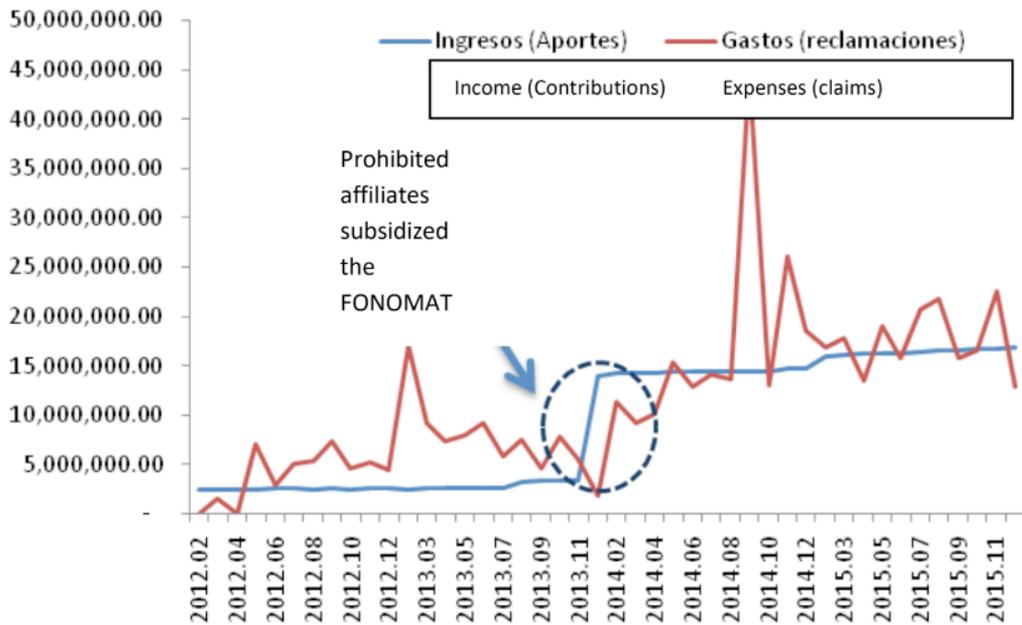
*Figures up to May 2016



Graph 3. Composition of Compensation Fund Expenses (2004-2016*)

Source: Ministry of Transport and Communications

*Figures up to May 2016



Graph 4. Series of Income and Expenditures by FONAMAT (SENASA), 2012-2015. RD\$

Source: National Health Insurance (SENASA) –Financial Statements

IS FONAMAT SIMILAR TO THE FUNDS DESCRIBED? - DOMINICAN REPUBLIC

An analysis of FONAMAT, in light of Social Security, requires special considerations. On the one hand, Law 87-01 indicates the events covered by the Family Health Insurance, which also excludes traffic and labor accidents. However, in the case of traffic accidents, these must be covered by the Insurance and Bonds Law. Furthermore, it indicates that the expenses derived from traffic accidents will be charged to the mandatory motor vehicle insurance. The latter needs a clear distinction. On the one hand, there is the “Insurance Law” or Civil Liability (Law 146-02) and on the other, the mandatory traffic accident insurance (SOVM), which does not exist in the country. Although they seem similar financial products, their difference is not minor. In simple terms, the former protects the insured’s assets (health, property damage and bonds) and the latter has a social objective that guarantees medical attention to victims of traffic accidents.

That said, coverage for traffic accidents in the country is ineffective. Due to the nature of the policies issued as “Law Insurance”, they restrict the coverage to the insured and do not extend in the form of family compensation. In addition, there is evidence of a significant number of vehicles without “Law Insurance”. Likewise, the non-existence of mandatory traffic accident insurance makes it impossible to adequately manage victims. For this reason, the issue of accidents on public roads remains nationally valid. Indeed, the pressure for solutions to this problem generally falls on the National Social Security Council. The latter must contain, on the one hand, the social pressure for adequate health services and, on the other, the financial pressure of the ARS over the PSS.

Although the CNSS is responsible for the

study and start-up of the National Accident Fund, it is no less true that it exclusively seeks solutions for affiliates in the contributory and subsidized regimes. If the rule is reviewed, it is found that the benefits include: 1) emergency medical care, 2) hospitalization, medications and diagnostic means, 3) surgical procedures, 4) treatment and rehabilitation and 5) funeral expenses. Also, the norm indicates the limit of expense per affiliated victim (up to 40 minimum wages). With this scenario, is the FONAMAT the ideal solution for traffic accidents? The answer to this question has multiple edges. Despite this, I seek an answer based on international experience.

When comparing FONAMAT with the three funds described above, interesting patterns emerge. First, the funds operate as an integral part of the Mandatory Traffic Accident Insurance (SOAT). Second, the funds are designed to help, depending on the country, victims of unidentified or uninsured cars. Third, the administration of the fund is carried out by institutions of the central administration, the Ministry of Health and Social Protection (Colombia) and the Ministry of Transport and Communications (Peru) or decentralized entities (Bolivia).

However, it is specifically sought to compare the FONAMAT with the ECAT of Colombia. As indicated, coverage in Colombia is carried out in tranches and the fund is “second floor”. In this sense, the FONAMAT, as a rule, is financed through dispersed contributions by the Social Security Treasury (TSS). The premium is set by resolution and is different between schemes. In effect, the resources come from public transfers and private contributions. For its part, the coverage is approved in the rule itself, however, there is a maximum limit of spending per affiliated victim.

In conclusion, FONAMAT, by its nature, is a complementary fund. Including, it must

operate on the basis of premiums paid to compulsory insurance. In comparative terms, the current limitations make it operate above the Colombian compensation fund described above. As an example, in the event of a traffic accident, the level of complexity of the victim will activate up to the level of financing necessary. If you exceed the SOAT coverage, the compensation fund is activated. If more resources are still needed, the FONAMAT is finally activated. Conceptually, FONAMAT is a third-tier fund.

FONAMAT PERFORMANCE: NATIONAL HEALTH INSURANCE CASE (SENASA)

The situation described shows a difficult situation for the ARS. Although the resources for traffic accidents flow according to what is established by law, the premium dispersed by the TSS is set by resolution and remains low. Until 2015, the monthly premium per contributory member was \$9 pesos, while that of the subsidized member was \$4 pesos. In this context, the performance of the fund is reviewed based on a specific ARS. For these purposes, SENASA is considered as the ARS with the greatest access to public information on its operations.

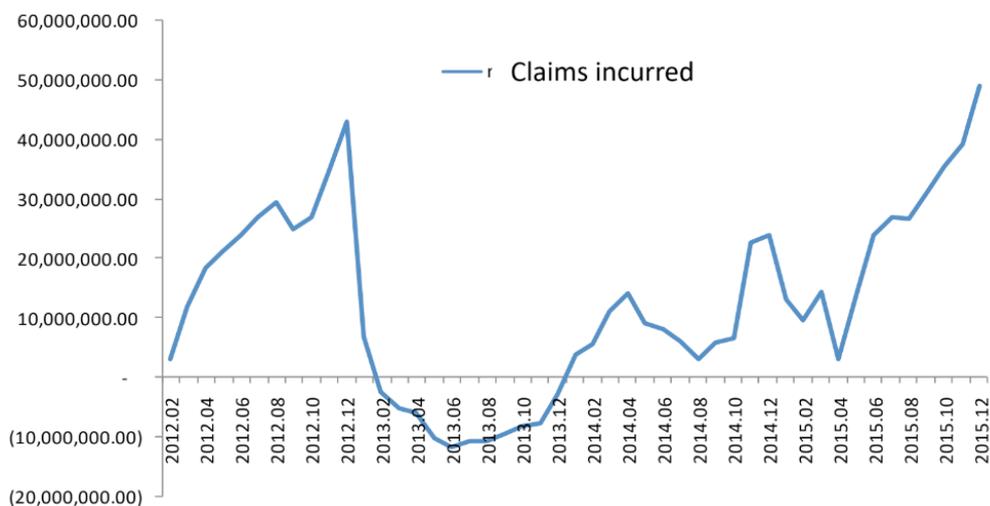
Figure 4 describes three different patterns. The first comprises the years 2012-2013, where the FONAMAT covered only contributory affiliates. There is evidence of a deficit gap. The average monthly deficit reached RD\$3 million during that period. Subsequently, transitory FONAMAT is approved, which includes coverage of subsidized affiliates. This produces a surplus period of approximately ten months. The average surplus reached RD\$2.6 million. The last tranche 2014-2015, a reversal of the surplus is verified. The monthly deficit averaged RD\$3.7 million. As evidenced, the stability of income is opposed to the variability of expenses.

In addition to the nominal evolution of income and expenses for the period, an accounting element is added that records the expense accrued but not settled, validated or reported. This element is regulated by SISALRIL through administrative resolution No. 000163 of the year 2009. The accounting moments indicated, therefore, are summarized in the so-called incurred claims. The latter are defined as the sum of paid claims, plus settled claims pending payment, plus claims pending validation and settlement, minus settled claims for payment and those pending validation from the previous period. Graph 5 presents the evolution of the variable.

The behavior of the series presents a significant challenge. In simple terms, expenses for FONAMAT are increasing exponentially. However, the SENASA case is unique, since it is the only ARS with the power to manage affiliates in both the contributory and subsidized regimes. Two policy elements emerge from the above. One, short-term, where periodic review of the capitation by the TSS is required. And another, medium-term, that seeks the design of a mandatory traffic accident insurance.

Despite all of the above, it is important to determine what is the premium that guarantees the balance point between income and expenses for FONAMAT in SENASA. This data is interesting because it becomes a reference for the real cost of these claims. To do this, on the one hand, an iteration exercise is used to determine the level of capitation necessary to cover expenses and pending claims by SENASA. In addition, a static-comparative analysis is included that evaluates what the increase must be with respect to the 2014 level in both regimes. Although the analysis is partial and specific, it offers a basic input to be corroborated by subsequent actuarial studies.

Table 1 summarizes the reference



Graph 5. Claims incurred by FONAMAT (SENASA), 2012-2015. RD\$

Source: Calculated by the author from Financial Statements (SENASA)

	Contributory	Subsidized
affiliates	472,764	3,011,036
monthly capita	9.00	4.00
annual capita	108.00	48.00
Annual Total Capita	51,058,512.00	144,529,728.00
Authorizations for FONOMAT	4,310	7,569
Average cost per care	23,794.18	23,766.32
Total Cost A	102,552,922.71	179,887,308.71
pending claims	13,366,596.61	44,749,040.83
Costo total B	115,919,519.32	224,636,349.54
Operative result	(64,861,007.32)	(80,106,621.54)

Tabla 2. Línea base (2014) de ingresos y costos FONAMAT (SENASA). RD\$

Source: Statistical Bulletin - 2014 (SENASA)

	Contributory	Subsidized
Affiliates	472,764	3,011,036
Monthly capita	20.43	6.22
Annual capita	245.20	74.60
Total annual capita	115,919,519.32	224,636,349.54
Authorizations for FONOMAT	4,310	7,569.00
Average cost per care	23,794.18	23,766.32
Total Cost A	102,552,922.71	179,887,308.71
Pending claims	13,366,596.61	44,749,040.83
Total Cost B	115,919,519.32	224,636,349.54
Operative result	-	-

Table 3. Results by FONAMAT regimen in SENASA.. RD\$

Source: Calculations made by the author based on the 2014 statistical bulletin (SENASA)

parameters by regimen. In the particular case of the contributory, the number of affiliates is 472,764 for an annual capitation of RD\$51 million. The total cost including expenses and pending claims for the period amounts to RD\$115.9 million for a deficit of RD\$64.9 million. For its part, the subsidized has 3,011,036 affiliates. Annual capitation reached RD\$144.5 million, while the total cost was RD\$224.6 million for a deficit of RD\$80.1 million.

Table 2 shows the results after the iteration exercise. In this sense, the objective is to determine the balance capita that equalizes income and expenses. For the contributory, the capitation would be increased by 127%, going from RD\$9 to RD\$20. For the subsidized, the capitation would increase by 55%, from RD\$4 to RD\$6. The total contributions would increase from RD\$195.6 million to RD\$340.6 million only in SENASA. The increase represents 74%. It is evident, the need for an adjustment in the capita towards the fund. The premium adjustment is different from one system to another. On the contributory side, the lower number of members increases the premium by almost RD\$12. For its part, in the subsidized, the premium adjustment is RD\$2, being lower due to the number of affiliates.

CONCLUSION

The proper functioning of FONAMAT is a public policy challenge. The frequency and complexity of traffic accidents in the country reflect serious deficiencies in the design, administration and coordination of mechanisms that mitigate their social and economic cost. It is for this reason that a financial solution to the coverage of victims in traffic accidents, escapes particular considerations of social security. That said, an intersectoral public-private effort is needed that follows a comprehensive agenda on health, transportation, and insurance issues.

This combination guarantees effective results in the short and medium term, reversing the current trend of victims in traffic accidents.

Notwithstanding this, the operations of the transitory FONAMAT present coverage and financing challenges. On the coverage side, only contributory and subsidized affiliates are covered. While on the financing side, there is a ceiling for expenses derived from these accidents. The latter, moreover, must be evaluated in the light of implicit considerations of the substance.

Since Law 87-01 seeks the creation of a National Traffic Accident Fund.

And this contrasts with the subsequent resolutions that set in motion the National Fund for Medical Attention for Traffic Accidents. Their difference is not minor, the first would cover compensation that the second does not contemplate. As indicated in the document, the absence of mandatory insurance hinders the operations of the current fund.

As long as the bases for a national fund are not created, the adjustment to the capitation of both regimes will be delayed. Under the current structure, the pressure of an eventual adjustment would fall on the TSS. The latter would be in a position to be evaluated due to potential mismatches and gaps in resources to be dispersed within the system. Finally, the article seeks, on the one hand, to understand the objective of FONAMAT, and on the other, to determine the approximate premium that guarantees financial balance.

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