



THE PROFILE OF A WANTED VEHICLE

1. INTRODUCTION

In view of the high rate of vehicle theft and hijackings in South Africa, it is not surprising that the risk profile of vehicles features prominently in purchasing decisions. Unfortunately, the lack of reliable published information on vehicle risk profiles results in decision-making that relies on anecdotal information, or worse, information gleaned from unreliable sources.

This document looks at the vehicle crime holistically by:

- looking at the general characteristics of vehicle crime in South Africa;
- giving a general overview of the profile of a wanted vehicle;
- defining “risk” as a method of measuring the risk profile of vehicles; and
- looking at the factors that influence the risk profile of vehicles.

The document further gives general guidelines when buying a vehicle.

2. GENERAL CHARACTERISTICS OF VEHICLE CRIME IN SOUTH AFRICA

2.1 The nature of vehicle crime in South Africa

The high levels of violence associated with vehicle crime and a relatively low vehicle recovery rate of 43% for stolen and hijacked vehicles confirms that organised crime is primarily responsible for vehicle theft and hijackings in South Africa. Criminals (i.e. professional thieves and robbers) are in this ‘business’ to make money and not to take the vehicle for a joy-ride.

2.2 What is driving vehicle crime in South Africa?

As with all businesses, the success of this ‘business’ is determined by the market, which encompasses the demand and supply for vehicles.

Unfortunately, many of the market forces that determine the illegal vehicle market are exactly the same as those of the legitimate market.

2.3 The markets for stolen and hijacked vehicles

Criminals use the following markets to dispose of stolen and hijacked vehicles:

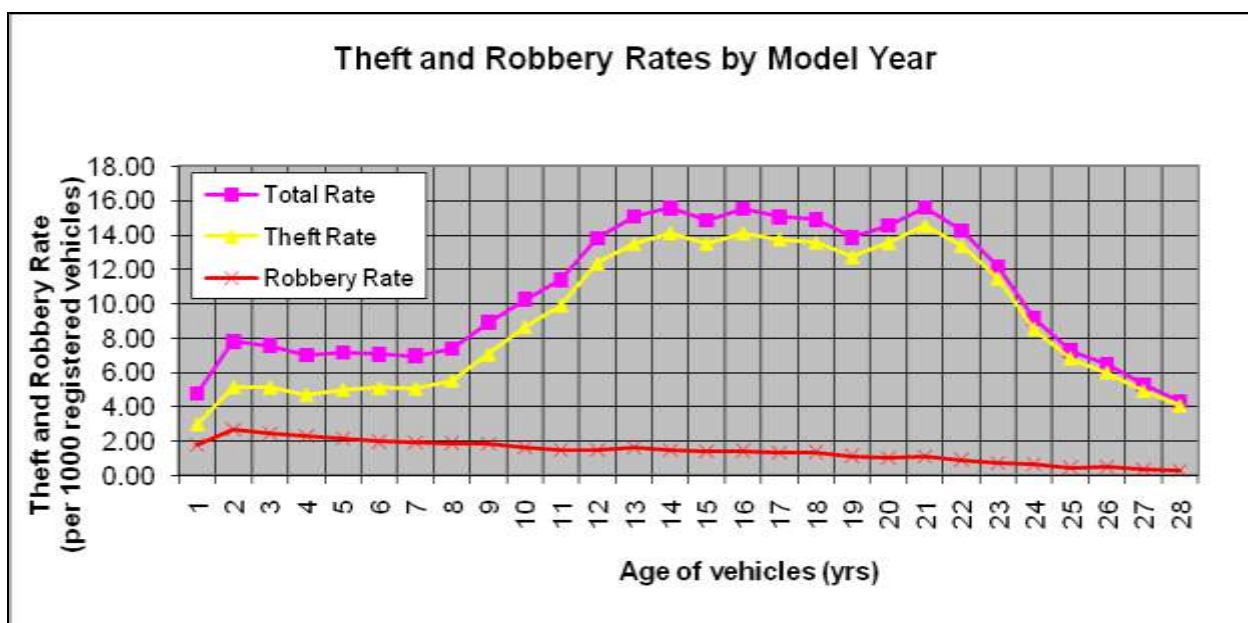
- The South African motor vehicle market, accounting for the disposal of approximately 50% of stolen and hijacked vehicles;
- Exportation to other countries, accounting for approximately 30% of stolen and hijacked vehicles; and
- The Second-hand parts market (i.e. chop shops), accounting for approximately 20% of stolen and hijacked vehicles.



3. GENERAL PROFILE OF A WANTED VEHICLE

An analysis done by BACSA over a number of years has identified the basic characteristics of the vehicle crime market. These characteristics haven't changed much over the years.

It was found that predominantly older vehicles (7 – 21 years old) are of higher risk of theft, while 1 to 4 year old vehicles are at the highest risk of robbery (hijacking). Please see the graph below.



Sedans are the most frequent target for criminals. However, mini-buses and pick-ups are at a much higher risk of being stolen or robbed than any other type of vehicle. The risk of robbery for mini-buses is the highest.

It was also found that entry-level (i.e. cheaper) vehicles of popular makes and models are of high risk in all age groups and classes of vehicles. Closely linked to this is the legitimate market volume. It was also found that vehicles with a high market volume are normally of high risk.

Although all of the above-mentioned is true, it was found that in some cases, irrespective of the age, type or market volume, the brand characteristics (e.g. performance, the status associated with a vehicle) do play an important role in the risk profile of a vehicle. As in the legitimate market, some vehicles are more desirable than others.

To understand these findings, a number of factors were looked at and are described below. Most of these factors are closely linked and influence each other.

4. RISK OF THEFT AND HIJACKING

Although the market volume does play a role in the risk profile of a vehicle, the raw number of vehicles stolen or hijacked is obviously not always a good indication of the *risk* that such a vehicle holds for the owner of the vehicle. It is obvious that the more vehicles available to be stolen, the more vehicles will be stolen. This, however, is not always a good indication of the risk that the specific vehicle holds for the owner of the vehicle.

In an effort to determine the risk of a vehicle being stolen or hijacked, it was found by BACSA that the *risk* is best determined by reference to thefts or hijackings per thousand vehicles registered

rather than numbers. For example, if 100 000 vehicles of model A are registered and 400 vehicles are stolen, the **risk** (or rate) will be 4 per 1 000. If 50 000 vehicles of model B are registered and 300 vehicles are stolen, the **risk** will be 6 per 1 000. Thus, even though more of model A have been stolen, the **risk** of theft that model B holds for the owner is 33% higher than that of model A.

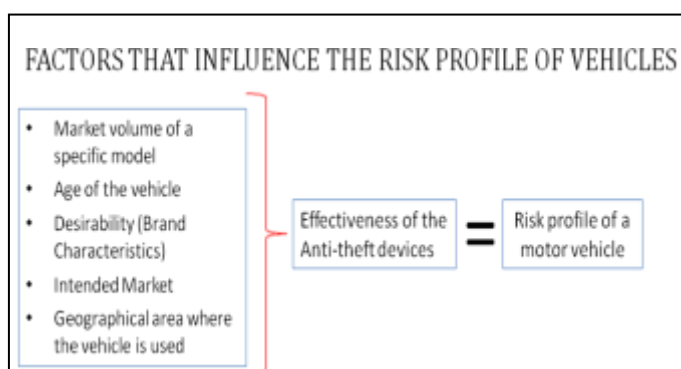
However, it was also found that the risk calculation is only accurate for models with large sales and is not accurate for models with small market share.

The findings in this document are based on the above-mentioned risk calculation.

5. FACTORS THAT INFLUENCE THE RISK PROFILE OF VEHICLES

5.1 The effectiveness of anti-theft devices

The role that security and anti-theft devices have on the risk profile of a motor vehicle should never be underestimated. It plays a major role and includes not only the electronic security or anti-theft devices but also the manner that the original vehicle identity is protected (i.e. marking of vehicle).



The above illustration demonstrates that the effectiveness of the anti-theft devices plays a major role alongside the other factors discussed in this document and causes many exceptions to the rule.

5.1.1 The role of electronic security devices (Anti-theft devices)

The sophistication of electronic security or anti-theft devices has a major impact on the overall theft incidence of a model range.

The effect of this can best be seen in the entry-level models. In an effort to cut costs and to be competitive in its market segment, many of these entry-level models are fitted with a low level anti-theft device. Others have no anti-theft device at all. The theft rates for these vehicles are normally very high.

A sophisticated anti-theft device that cannot be defeated at the roadside might lead to a higher risk for hijackings, especially if it is a high performance vehicle.

5.1.2 Marking of vehicles

As mentioned previously, most of the stolen vehicles are intended for the South African market. To be able to sell the vehicles in South Africa, the original identity of the vehicles needs to be changed or concealed. The easier it is to remove or conceal the identity of a vehicle, the more desirable the vehicle to criminals.

Investigations have proved that in almost all vehicle-related crimes, the primary and secondary identifiers (Licence number, VIN and Engine number) have been altered or removed in order to conceal a crime or the identity of the vehicle.

It was found that models that are standard fitted with micro-dots are less desirable for



the organised criminals. It is impossible to hide the original identity of such vehicles due to the efficacy of the micro-dotting technology.

5.2 The market volume of a specific model

The market volume of a specific model has a major influence on the total number of vehicles likely to be stolen or hijacked as well as on the risk for theft and robbery. When a model makes up a large percentage of the vehicle fleet, it will feature highly in the actual number of vehicles stolen. This effect can be seen in the graph below. Most of the entry-level (i.e. cheaper) vehicles, especially those which have been in the market for a number of years, fall into this class and are of high risk.

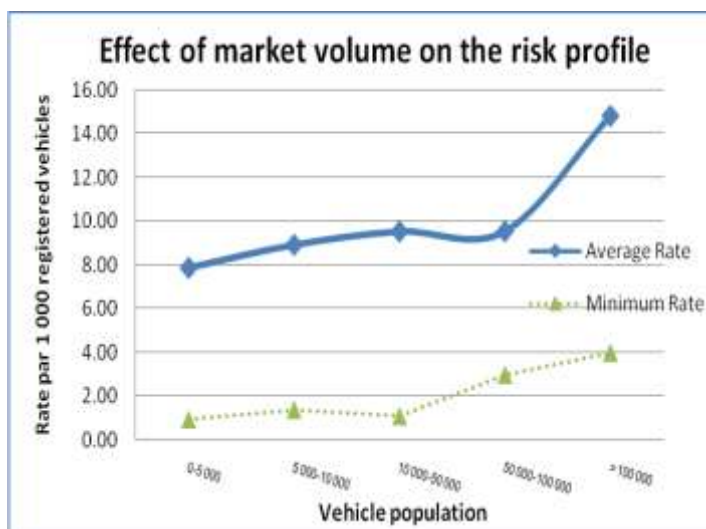
This is mainly due to the fact that the high number of vehicles and the high turn-over in the legitimate market makes it easy to dispose of stolen vehicles. It is easy for an illegal vehicle to disappear in the large number of legal vehicles in the population.

The high demand for second-hand parts to repair damaged vehicles or to upgrade vehicles also plays an important role in the demand for vehicles.

On the other hand, newly released or lesser known models typically have low theft numbers and low risk profiles. This is mainly due to the fact that the illegal market for the stolen vehicles has not been fully developed.

Exotic vehicles, such as Porsche, can be expected to have very low theft numbers and low risk profiles due to their scarcity and high visibility on the second-hand market with very low demand for used parts.

However, it is important to note that although the above might be true for most models, some models in any group have a notable lower or higher risk than the average. Other factors do play an important role in the risk profile of models, of which the most important is the scurrility device fitted to the vehicle.



5.3 Age of the vehicle

It remains a characteristic of the vehicle crime market that predominantly older vehicles (i.e., those between 8 – 18 years old) are of higher risk of theft, while 1 to 4 year old vehicles are at the highest risk of robbery. The average age of a stolen vehicle in 2007 was 12 years, while the average age of a robbed vehicle was 7 years.

This can be attributed to:

- The efficacy of improved anti-theft measures in newer vehicles. It is easy to steal older vehicles to hide its original identity and difficult to steal new vehicles; and
- The fact that many of the older vehicles fall into the large market volume segment where there is a high demand for second-hand vehicles and second-hand parts.





However, the exception is new vehicles for which the body design has not changed much over a number of years. These vehicles are of high risk for theft due to the high demand for second-hand parts to repair damaged vehicles or to upgrade older vehicles. The risk profile for these vehicles increases if the efficacy of installed anti-theft measures is poor or outdated.

5.4 Desirability (Brand Characteristics)

Some makes and models are particularly attractive to professional vehicle thieves because of their brand and performance characteristics.

This is especially true for the more expensive medium market volume vehicles. Many criminals would like to be seen in these high performance vehicles or require the vehicle to perform hijackings, house robberies, business robberies and Cash-In-Transit robberies. There remains a market for a high performance used vehicles offered at 'affordable' prices.

Again, the risk profile for specific models within this class is influenced by efficacy of the anti-theft measures of the vehicle.

5.5 Intended Market

Some vehicles are stolen or hijacked for a specific market. For example, four-wheel drive vehicles and pick-ups are, in many cases, stolen or robbed specifically for the export market to African countries. Mini-buses are stolen and hijacked for the internal taxi market and second-hand parts market.

In some instances, vehicles are hijacked or stolen for their freight. The generally higher recovery rate in South Africa for trucks indicates that the goods rather than the vehicles are being targeted.

5.6 Geographical area where the vehicle is used

The risk for a specific model of vehicle in an area in which a vehicle is used is also influenced by the proximity of the intended market. For example, four-wheel drive vehicles will be at higher risk, if used in areas near a border. It will be quicker and of less risk for the criminal to take the vehicle over the border than to transport the vehicle from other areas. Other vehicles, for example, light delivery vehicles and light passenger vehicles will be in high demand and at high risk in the bigger cities.

6. GENERAL GUIDELINES WHEN BUYING A VEHICLE

The above-mentioned facts should be taken into consideration when buying a new or used vehicle. Although it might not necessarily influence the final decision when buying a vehicle, it should be used to manage the risk associated with the vehicle.

It is further recommended that the following should be considered:

- Never buy a vehicle without the eNaTIS registration certificate and never buy an unlicensed vehicle. Check the information, especially the VIN, engine number, make, model and colour on both the registration certificate and licence disc. Make sure that the information on the two certificates corresponds and that it is the same as the information on the vehicle. Check for spelling mistakes on the certificates (especially with regard to Afrikaans spelling). Any such obvious mistakes would suggest the likelihood of a fraudulent transaction.





- Effectiveness of the security device of the vehicle. Ensure that your vehicle has a good quality security device installed. Any VESA accredited fitment centre can be contacted to check your system. VESA assures that the vehicle security equipment suppliers and their products are re-evaluated annually and that they conform to a minimum allowed standard. If you have not complied with your insurance requirements for vehicle security in the event of a claim, you may have to pay additional excesses or even have your claim repudiated. Read your policy, if it states 'VESA Approved Security System' and you do not have a valid VESA Certificate, you could be in for a nasty surprise. If you are in doubt, contact your broker. More information can be found on www.vesa.co.za.
- Tracking devices should be considered, even for cheaper and used vehicles. The owner of the vehicle should insure that only tracking devices of reputable suppliers are used. More than 75% of all stolen/hijacked vehicles fitted with recovery devices are recovered by these reputable companies.
- It is strongly recommended that vehicles are microdotted. All new Nissans and BMWs are all microdotted as a standard option by the manufacturer. Most of the other manufactures and importers do have the option to microdot the vehicles. Owners of new vehicles should insist that all vehicles are microdotted. Used vehicles should also be microdotted by the owner of the vehicle. More information can be found on www.datadot.co.za.
- Verify the information of the vehicle. TransUnion Auto Information Solutions has long provided a vehicle verification service to motor dealers and financial institutions allowing them to check the 'pedigree' of a used vehicle. This service has now been made available directly to the general public on the Internet. Simply by logging on to www.myautoinfo.co.za, a consumer can purchase a peace of mind Auto Check report at a cost of R92. This check will raise alerts about discrepancies with the vehicle's VIN and engine number (where any such discrepancy is often an indication of fraudulent activity), as well as the date of manufacture and the vehicle's make, model and colour. It will also indicate whether there is any outstanding finance owing on the vehicle. In addition, the Auto Check will pick up whether a security alert has been placed on the vehicle by its rightful owner – an anti-crime tactic widely used by car rental companies, for example, to prevent hirers from attempting to sell the rented vehicle to unsuspecting consumers and dealers.

Due for release in early 2009, a revision to the Auto Check report will now also include a SAPS indicator - whether the car has been reported stolen or is wanted in connection with an investigation into an alleged crime. This SAPS information was previously only available to authorized motor dealers in the form of a TransUnion Verification Report (HPI). In any event, before signing on the dotted line, consumers should protect themselves by insisting on being furnished with a current Verification Report from the dealer or alternatively by obtaining an Auto Check directly from www.myautoinfo.co.za. Queries can also be directed to the TransUnion Auto Information Solutions Customer Services Centre on 011 428 2013.

- Buy from highly reputable dealers which are members of organisations such as the Retail Motor Industry (RMI) or the Independent Dealer Association (IDA). It is always better to buy from these reputable dealers that can be traced and held liable if any problems later arise. Beware of private sellers, especially if you don't know the owner. Check that the address on the registration certificate is valid and that the person is living at the address.
- It is always a good idea to do a mechanical check on used vehicles. The Automobile Association (AA) can assist with this. Request them to also check the stamped VIN and Engine numbers of the vehicle for any changes. It is also sometimes very difficult for a non-technical person to find the VIN and Engine number on the vehicle. The AA can also assist by verifying the vehicle's information via the AA Autocheck service provided by them.





- And then, the most important rule, if you are in doubt or do not feeling totally sure about a vehicle, walk away and don't buy it!

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